

Chimney Smoke Chamber Repair: Inside Your Chimney — Flues, Smoke Chambers, and What the Camera Sees

A Plain-English Tour of the Parts You Can't See — and What It
Costs to Fix Them in 2026

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Chapter 1: Chimney Smoke Chamber Repair Starts With What's Hiding in There

Everybody looks at the outside of their chimney. The brick, the crown, the cap — that's what you see from the yard, and there's a whole shelf of my books about that side of the stack. This book is about the other side. The inside.

Inside your chimney is a second chimney you never see: the flue, the passageway that carries smoke, heat, and combustion gases from your fireplace up and out. Between your firebox and that flue sits the smoke chamber — a funnel-shaped space that gathers the smoke and squeezes it into the flue. These interior parts take more abuse than anything else on your house. Every fire you burn sends superheated gases, acidic moisture, and creosote through them. Over the years, the flue tiles crack, the smoke chamber's mortar crumbles, and creosote builds up in layers like geological strata.

Here's the thing: you can't see any of it. Not from the ground, not from the roof, not by sticking your head in the fireplace with a flashlight. The only way to know what's going on

inside your chimney is to put a camera in it. That's what a Level 2 chimney inspection is — a video camera run up the flue, showing every tile, every joint, every crack, on a screen you watch together with the sweep.

I've been doing this fifty years, and I've watched homeowners' faces when they see their own flue on camera for the first time. It's always the same reaction: "I had no idea." Cracked tiles they couldn't see. A smoke chamber that looks like a cave. Creosote glazed on like black glass. Most of them have been burning fires in that chimney for years.

This book is the tour I wish every homeowner got before their first fire of the season: what lives inside your chimney, what the camera finds, what each finding means, and what the repairs cost in 2026. We're staying inside the flue the whole way — the outside of the chimney is covered in my other books. In here, it's flue tiles, smoke chambers, creosote, parging, and relining. That's the whole world, and it's enough.

Chapter 2: The Anatomy Lesson — Firebox, Damper, Smoke Chamber, Flue

Before the camera goes in, you need the map. A masonry chimney has four interior zones, bottom to top, and each one fails in its own way.

The firebox is where the fire burns — the open box you see when you look into the fireplace. It's lined with firebrick, a special dense brick made to take direct flame. Firebrick and its refractory mortar take a beating, and cracked firebrick is common and usually a simple repair. But the firebox isn't our focus today — it's the part you can already see.

The damper sits at the top of the firebox — a metal flap that opens when you burn and closes when you don't, to keep your heated air from going up the chimney all winter. Dampers rust, warp, and seize. A rusted damper is a clue, by the way: rust means moisture, and moisture in the damper area means moisture in the smoke chamber above it. We'll come back to that.

The smoke chamber is the funnel above the damper. Its job is to gather the wide, lazy smoke from the firebox and

compress it into the narrow flue above. In older chimneys, the smoke chamber is built from corbeled brick — each course stepped inward, like an inverted staircase, to narrow the passage. Those stepped corbels create ledges and pockets. Smoke hits those ledges, slows down, swirls, and drops creosote. The national fire code (NFPA 211) actually requires smoke chambers to be parged smooth — coated with refractory mortar — precisely because rough corbeled chambers are creosote factories and draft-killers. Most older Texas chimneys were never parged, or the parging fell off decades ago.

The flue is the vertical passage from the top of the smoke chamber to the top of the chimney. In a masonry chimney, the flue is lined with clay flue tiles — rectangular or square sections of fired clay, typically two feet long, stacked with mortar joints. The tiles protect the surrounding brick and house framing from heat and corrosive gases. When the tiles crack — and they do, from thermal shock, chimney fires, age, and settling — heat and gases get to places they were never supposed to reach. That's when a chimney becomes dangerous.

Four zones. The camera sees the top three. Let's go look.

Chapter 3: The Camera Doesn't Lie — What a Level 2 Inspection Shows

A chimney inspection comes in three levels, and you need to know which one you're buying.

Level 1 is the annual checkup: the sweep looks at everything accessible — the firebox, the damper, the exterior, the accessible parts of the flue — with eyes and a flashlight. No camera, no tools opening anything up. It's what comes with your yearly sweep, and for a chimney with no changes and no problems, it's enough. In 2026, a Level 1 inspection bundled with a sweep typically runs \$100 to \$250.

Level 2 is the camera inspection. The sweep feeds a video camera up the flue — top-down, bottom-up, or both — and records the entire interior: every flue tile, every joint, the smoke chamber, the damper area. You watch it live on a screen. It documents everything in images and video, which matters for real estate transactions, insurance, and getting accurate repair quotes. Level 2 is the standard after a chimney fire, when you're buying or selling a house, when you've changed the heating appliance, or when something

seems off — smoke in the room, odd smells, animal noises. In 2026, a Level 2 camera inspection typically costs \$250 to \$600, with most landing in the \$300 to \$500 range.

Level 3 is the invasive one: opening walls, removing chimney components, getting at concealed areas. It's rare, it's expensive — \$600 to \$5,000 or more — and it's only called for when serious hidden damage is suspected. Most homeowners never need one.

Here's what I tell everybody: if your chimney hasn't had a camera in it in the last few years, or ever, get the Level 2. The \$300 to \$500 it costs is the best money in chimney maintenance, because everything downstream — every repair decision, every quote — depends on what the camera shows. A contractor quoting flue work without camera footage is guessing. Make him show you the video.

And a practical note: book it in spring or summer. Everybody calls in October. The sweeps are slammed, the prices are highest, and you're competing with every other homeowner who smelled the first cold front. A spring inspection gives you all summer to get repairs done before burn season.

Chapter 4: Cracked Chimney Flue Tiles —

The Most Common Finding

The single most common thing the camera finds is cracked flue tiles. I'd estimate the majority of Texas masonry chimneys over twenty years old have at least one cracked tile. Here's why they crack and what it means.

Thermal shock. Clay tiles expand when heated. Light a roaring fire in a cold chimney and the inside face of the tile heats hundreds of degrees in minutes while the outside face is still cold. The tile can't expand evenly, so it cracks — usually vertically, sometimes in a spiderweb. This is the number one cause, and it's why sweeps tell you to build fires gradually, especially the first fire of the season in a cold chimney.

Chimney fires. A creosote-fueled chimney fire can hit 2,000 degrees. Clay tiles aren't made for that. A chimney fire cracks tiles, sometimes shatters them, and destroys the mortar between them. Many homeowners have had a small chimney fire without knowing it — a roaring sound, then it's over. The camera finds the damage years later.

Age and settling. Mortar joints between tiles deteriorate. The chimney settles a fraction of an inch. Tiles shift and crack at the joints. Water gets in from above through a failed crown and freeze-thaw cycles do the rest — North Texas gets enough hard freezes to matter.

What a cracked tile means. The flue liner has one job: contain heat and combustion gases and get them out the top. A cracked tile is a breach in containment. Heat escapes into the surrounding brickwork and, worse, into the air spaces around the chimney — near wood framing, near the attic. Combustion gases, including carbon monoxide, can leak through cracks into the house. And every crack is a place for creosote to lodge and moisture to enter, which makes the next crack worse. One cracked tile is a repair. Multiple cracked tiles, or tiles with missing pieces, is usually a relining conversation.

The repair spectrum. A single cracked tile in an otherwise sound flue can sometimes be repaired in place — the camera guides the work, and there are systems for sealing or replacing individual tiles. But isolated tile replacement inside a standing chimney is fiddly, expensive per tile, and only makes sense when the rest of the flue is genuinely sound.

When the camera shows cracked tiles at multiple levels, deteriorated joints throughout, or missing tile sections, the honest answer is a new liner — which is Chapters 9 through 11.

Chapter 5: The Smoke Chamber — Corbels, Gaps, and Rough Brick

If the flue tiles are the most common camera finding, the smoke chamber is the most surprising one. Homeowners expect the flue to look like a clean tube. Nobody expects the smoke chamber — and on camera, an unparged corbeled smoke chamber looks like the inside of a stone cave.

Remember the anatomy: the smoke chamber funnels smoke from the wide firebox into the narrow flue, and in older chimneys it's built from corbeled brick — stepped courses narrowing inward. Every step is a ledge. Here's what the camera typically finds:

Rough, exposed corbels. The stepped brick was never smoothed. Each ledge catches smoke, slows the draft, and collects creosote. The chamber looks like stairs, and it performs like stairs — badly. Smoke hits the steps, eddies, and some of it spills back into the room. If your fireplace has always been a little smoky, a rough smoke chamber is a prime suspect.

Missing or crumbled mortar. The mortar between the

corbeled bricks takes direct heat and corrosive gases. Over decades it crumbles and falls out, leaving gaps between the bricks. Gaps in the smoke chamber are gaps in containment — heat and gases escaping into the surrounding structure, exactly where you don't want them. On camera, they show up as dark voids between bricks, sometimes with daylight or insulation visible behind them. That's a "stop using this fireplace until it's fixed" finding.

Old parging, failed. Some chambers were parged decades ago and the parging has cracked, delaminated, and fallen off in sheets. The camera shows patches of smooth coating with bare brick showing through, and chunks of fallen parging sitting on the smoke shelf below. Failed parging is worse than no parging in one way: the loose chunks can obstruct the flue.

Undersized or misshapen chambers. Sometimes the chamber was built wrong — too abrupt a transition, offset from the flue, or narrowed by sloppy construction. The camera shows it plainly. A bad chamber shape means bad draft for the life of the chimney unless it's corrected.

The smoke chamber is also where the camera earns its keep on draft complaints. "My fireplace smokes" has a dozen possible causes, but a camera look at the chamber answers

the chamber question definitively in about five minutes.
Rough chamber, missing mortar, failed parging — there's
your smoke problem, and there's your fix.

Chapter 6: Smoke Chamber Parging — Smoothing the Funnel

Parging is the fix for a rough smoke chamber, and it's one of the best-value repairs in the chimney world. The word just means coating — in this case, coating the inside of the smoke chamber with a smooth layer of refractory mortar.

What it does. A parged chamber is smooth. Smoke flows over it instead of eddying around corbel steps. Draft improves — sometimes dramatically. Creosote has far less rough surface to cling to, so buildup slows. The parging seals the gaps between bricks, restoring containment. And it protects the brick and mortar behind it from direct heat and corrosive gases. The fire code requires it for a reason: a smooth chamber is a safer, better-drafting chamber.

How it's done. The sweep or mason accesses the chamber through the firebox — no demolition, no opening walls. The chamber gets cleaned first, down to sound brick. Then refractory mortar — not regular mortar, but high-heat refractory cement rated for the temperatures a smoke chamber sees — is applied by hand or sprayed on, built up to

a smooth, continuous surface over the corbels. It cures, and the chamber that looked like a cave now looks like a proper funnel. The whole job is typically done in a day.

What it costs. In 2026, smoke chamber parging typically runs \$900 to \$2,000, depending on the chamber's size, condition, and access, and on whether it's hand-troweled or spray-applied. That's the national range; Texas pricing sits in the middle of it. It's a fraction of a reline, and for a chamber that's rough but structurally sound, it's the right repair — not a compromise.

When parging isn't enough. Parging is a surface repair. If the chamber bricks are loose, the structure is compromised, or there are major voids behind the brick, parging over it is cosmetics on a structural problem. The camera and the sweep's hands tell the difference — a chamber that moves when prodded, or bricks that shift, needs masonry repair first, parging second. And parging doesn't fix a cracked flue above the chamber. It's the chamber's repair, not the flue's.

One caution from fifty years of watching this work: make sure the parging is refractory mortar, not regular mortar or, heaven forbid, drywall compound or furnace cement smeared by a handyman. Regular mortar can't take the heat

cycling — it'll crack and fall off within a season or two, and you'll be paying for the job twice. Ask what's going on the wall. "Refractory mortar" is the answer.

Chapter 7: Creosote — The Three Stages and Why Stage Three Scares Sweeps

Creosote is the reason chimney fires happen, and the camera shows exactly how much of it you're living with. Here's the plain-English version of what sweeps see.

Creosote is the unburned byproduct of wood smoke — vaporized resins, moisture, and particles that condense on the cooler flue walls as smoke rises. Every wood fire makes some. How much depends on what you burn and how you burn it: wet or unseasoned wood makes far more creosote than dry seasoned hardwood. Slow, smoldering fires make more than hot, clean-burning ones. An oversized flue — too big for the fireplace — cools the smoke too fast and condenses more creosote. A cold exterior chimney condenses more than a warm interior one.

Sweeps talk about three stages:

Stage 1 is dusty, flaky soot — the light stuff that brushes right off. Normal. Every chimney has some. A routine sweep handles it.

Stage 2 is crunchy, tarry flakes — harder, shinier, stuck to the walls. It takes rotary tools and real effort to remove. It means the chimney's been going a while without cleaning, or the burning habits are creosote-heavy.

Stage 3 is glazed creosote — a hard, shiny, black glass-like coating baked onto the flue walls. It's highly concentrated fuel, it's difficult to remove — chemical treatments, rotary chains, sometimes multiple visits — and it's the stuff that turns a chimney fire from a scare into a disaster. When a sweep sees heavy Stage 3 glaze on camera, the conversation gets serious.

In 2026, a standard sweep runs \$150 to \$375. Heavy creosote removal — Stage 3 glaze, neglected flues — runs \$400 to \$900 or more, because it's hours of grinding work with specialized tools, not a brush pass. The economics are obvious: sweep every year for a couple hundred bucks, or skip five years and pay triple to grind out the glaze — assuming the glaze hasn't caught fire first.

The Texas wrinkle: a lot of Texas fireplaces burn occasionally — a dozen fires a winter. Occasional burning with long idle periods is actually a creosote-friendly pattern, because each fire's moisture condenses in a cold flue. And Texas's freeze-

thaw cycles work on the flue tiles between burns. The "we barely use it" chimney is the one that surprises people on camera. Annual inspection isn't just for daily burners. The fire code recommends it for every chimney, used or not.

Chapter 8: Gaps, Holes, and Missing Mortar

Inside the Flue

Cracked tiles get the attention, but the camera finds quieter problems that matter just as much.

Deteriorated joints between flue tiles. The mortar sealing each tile to the next breaks down over time — heat cycling, acidic condensation, age. On camera, the joints show as recessed lines, then gaps, then voids you can see into. Open joints between tiles are open paths for heat and gases to leave the flue. A flue with sound tiles but failed joints is still a breached flue.

Missing tile sections. Sometimes a tile is just gone — shattered by a chimney fire, or broken during some long-ago work, with the pieces sitting on the smoke shelf below. The camera shows bare brick where tile should be. Brick without tile protection in a flue is brick taking direct heat and gas exposure it wasn't designed for. This is a reline trigger — you don't patch around a missing tile.

Offset tiles. Tiles that have shifted so they're no longer aligned — one tile's edge protruding into the flue, creating a

ledge. Offsets catch creosote, disrupt draft, and usually mean the mortar bedding has failed. A flue full of offsets is a flue coming apart.

Foreign objects and blockages. The camera finds it all: bird nests, squirrel stashes, fallen brick, chunks of old parging, even the occasional tennis ball. A blocked flue is a carbon monoxide risk — gases that can't go up come back down into the house. This is why the "something seems off" inspection matters: animals in the chimney, smoke behavior changes, odd smells. The camera answers in minutes what guessing can't.

Water damage inside. White staining, spalling tile faces, rust streaks from the damper — the camera shows water's fingerprints all the way down. Water in the flue usually comes from above: a failed crown, a missing or bad cap, deteriorated exterior mortar letting rain in. The interior repair and the exterior water entry are one job, not two. Fix the flue and ignore the crown, and you're back on camera in three years.

The through-line: the flue is a system, and the camera reads the whole system. Tiles, joints, chamber, blockages, water — one inspection, one video, the full story. That's why the Level

2 is worth every penny.

Chapter 9: When the Flue Is Too Far Gone — The Relining Decision

There's a point where repairing the existing flue stops making sense and relining starts. Here's how that decision gets made honestly.

Reline when: multiple tiles are cracked at different levels, joints are deteriorated throughout, tiles are missing or offset, the flue is unlined (some older Texas chimneys never had tiles — just brick, which is a code violation and a fire risk today), or the flue size is wrong for the appliance. A reline gives you a new, continuous, correctly-sized flue inside the old chimney. It's the definitive fix.

Repair when: the damage is genuinely isolated — one cracked tile, one bad joint, a sound flue otherwise. Spot repairs exist and they're legitimate. But be honest about "isolated." If the camera shows one cracked tile at the top, one at the middle, and crumbling joints at the bottom, that's not isolated. That's a flue at the end of its life with the damage spread out.

The age math. Clay tiles last decades — often 40 to 50 years

in a well-kept chimney. But "well-kept" is doing heavy lifting in that sentence. A chimney that's had annual sweeps, a good crown, a cap, and no chimney fires will get the full life. A neglected chimney with water entry won't. When I look at a 35-year-old Texas chimney with cracked tiles at three levels, I'm not surprised — I'm looking at normal end-of-life for a hard-used flue.

The safety line. This is the part that matters most. A breached flue — cracked tiles, open joints, missing sections — is a fire and carbon monoxide risk. The fire code is blunt about it: the flue must contain the products of combustion. If it can't, the fireplace doesn't get used until it's fixed. I've told homeowners to stop burning until the relining is done, and I've meant it every time. A cozy fire isn't worth a house fire. Get the camera done, get the honest reading, and if the flue is breached, park the fireplace until it's relined.

The quote process. Relining quotes should be based on camera footage — yours, which you now have from the Level 2. The contractor should specify the liner type, diameter, length, insulation, and warranty in writing. Get three quotes. They should all be working from the same video. If one contractor hasn't looked at the footage, he's guessing, and his

number means nothing.

Chapter 10: Stainless Steel Liners — The Workhorse

When a flue needs relining, stainless steel is the default answer — the most common reline in America, and for good reason.

What it is. A stainless steel tube — flexible or rigid — dropped down the existing flue from the top, connected to the appliance below, sealed at the top with a new cap assembly. Flexible liners snake around offsets and bends; rigid liners go in straight chimneys in sections. Both come in diameters matched to the fireplace or stove — sizing matters, which is Chapter 12.

Why stainless. It handles all fuel types — wood, gas, oil, pellets. It resists the corrosive condensation that eats other materials. It's smooth, so creosote has less to grip and cleaning is easier. Installed right, it lasts 15 to 25 years, and many carry long warranties. And it goes in without tearing the chimney apart — no demolition, usually a day or two of work from the roof and the firebox.

Insulation. The liner usually gets wrapped in insulation, or

insulation gets poured around it. This isn't optional fluff — insulation keeps flue gases hot (hot gases draft better and condense less creosote), protects the surrounding masonry from heat transfer, and is required by code in many installations. A stainless reline quote without insulation specified is an incomplete quote. Ask.

What it costs. In 2026, a stainless steel chimney liner installed typically runs \$1,500 to \$4,000 for a standard residential chimney, with most straightforward jobs landing in the \$2,000 to \$3,500 range. The drivers: chimney height (more liner, more labor), diameter, flexible versus rigid, insulation, roof access and pitch, and whether the old flue needs cleaning or prep work first. A tall two-story chimney with offsets and a steep roof is the high end. A short straight single-story flue is the low end. Material alone runs roughly \$20 to \$90 per linear foot depending on type and quality; labor adds \$500 to \$1,500 on top.

The alloy question. Not all stainless is equal. Liners come in different alloys — 316Ti and similar grades for wood and coal, 304 for gas — matched to the fuel and the expected condensation chemistry. The wrong alloy in the wrong application corrodes. Your contractor should be specifying

the alloy for your fuel type. If he can't tell you which alloy he's installing and why, keep interviewing.

Chapter 11: Cast-in-Place and the Other Liner Options

Stainless is the workhorse, but it's not the only reline. Here's the rest of the field, honestly assessed.

Cast-in-place liners. A cement-like refractory mixture is pumped or poured into the chimney around an inflatable form, creating a seamless, insulated new flue inside the old one. The advantages are real: it's seamless (no joints to fail), it adds structural strength to a deteriorated chimney (it's the only reline that reinforces the stack), and it handles irregular or oversized flues that a round stainless tube can't fill well. The downsides: cost — typically \$5,000 to \$10,000 or more installed — and it needs specialized equipment and an experienced crew. It's the right answer for a chimney that's both unlined and structurally tired, where you want the reline to do double duty as reinforcement. For a sound chimney that just needs a new flue surface, stainless does the job for half the money.

Ceramic and thermocrete systems. Sprayed or pumped ceramic coatings that seal and resurface the existing flue.

They're quick to install and can last decades, but they're expensive — often in the cast-in-place price range — they need specialized installers, and they don't add structural strength. Think of them as a premium resurfacing: excellent when the flue shape is odd and the structure is sound, overkill otherwise.

Clay tile replacement. The old way: tear out the old tiles and stack new ones. It works — new clay tiles last 50 years — but it's labor-intensive, it usually means opening the chimney, and the installed cost typically exceeds stainless. It's the right call mainly in historic restoration, where keeping the original construction type matters. For a regular Texas home, stainless wins on cost and practicality.

Aluminum liners. Cheap, light, easy to install — and restricted to gas appliances only, with a short lifespan of 5 to 15 years. Aluminum can't take wood-fire temperatures. If anyone proposes an aluminum liner for a wood-burning fireplace, that's a hard no. For a gas-only flue on a tight budget, it's a legitimate economy option — but know what you're buying: a shorter-lived liner for a lower-temperature job.

The honest summary: for most Texas homeowners with a

wood-burning masonry chimney and a breached flue, a stainless reline is the answer. Cast-in-place earns its premium when the chimney needs structural help too. Everything else is a specialty tool for a specialty situation. A contractor who only sells one system will tell you it's right for every chimney. Get the second opinion.

Chapter 12: Sizing Matters — Why the Flue Has to Match the Fireplace

Here's a technical point that causes more fireplace problems than almost anything else, and it's invisible without the camera and a tape measure: flue size.

A fireplace flue has to be sized to the fireplace opening. The rule of thumb the trade uses: the flue's cross-sectional area should be roughly one-tenth the area of the fireplace opening for a round flue, slightly more for square or rectangular. Too small, and smoke can't get out fast enough — it spills into the room. Too big, and the smoke column cools and slows — weak draft, smoky fires, and heavy creosote condensation on the oversized walls.

Oversized flues are the classic Texas problem. A lot of older masonry chimneys were built with big square flues — 12 by 12 inches or larger — serving modest fireplaces. On camera, these flues show the signature: heavy creosote on the walls (the smoke cooled too fast and dumped its load), and the homeowner's complaint is always the same — "it smokes sometimes" and "it doesn't draw right." The fireplace was

fighting its flue from day one.

This is where relining does double duty. A stainless liner doesn't just replace damaged tile — it rightsizes the flue. Dropping a correctly-sized round liner inside an oversized square flue transforms the draft: the smoke stays hot, moves fast, and gets out. Homeowners who've fought a smoky fireplace for twenty years sometimes think we performed magic. We didn't. We gave the smoke a properly-sized highway instead of a parking lot.

The same principle applies to wood stoves and inserts. A stove designed for a 6-inch flue choked into an oversized masonry flue will burn dirty and build creosote fast. The liner sizes the vent to the appliance. When your contractor specs the liner diameter, ask him what it's sized to — "your fireplace opening" or "your stove's outlet" is the answer. "Standard size" is not.

And one related note: flue height matters too. A flue that's too short — below the roofline rules — won't draft properly no matter how clean it is. The camera won't show you this; the tape measure and the code book will. If the draft complaint survives a clean flue and a good chamber, look up: the chimney might just be too short.

Chapter 13: What the Camera Sees in Texas

Chimneys Specifically

Texas chimneys have a personality, and the camera shows it. A few patterns I see over and over in DFW:

The unlined chimney. More common than you'd think, especially in mid-century homes and in chimneys built by builders cutting corners. Just brick, no clay tiles, straight up. Every fire sends heat and acidic gases directly against brick and mortar that were never meant to take it. On camera, the brick faces are spalled, the mortar is gone in places, and the whole interior looks sandblasted. An unlined wood-burning chimney is a reline on day one — there's no "repair" for a liner that was never there.

Water damage from above. Texas gets its rain in violent bursts, and a chimney without a good cap takes the full force. The camera shows the signature: spalled tile faces at the top courses, white efflorescence streaking down the flue, rust on the damper, deteriorated mortar at the top that improves as you go down. The top-down pattern is the tell — damage worst at the top means water coming from the top. The

interior fix without the exterior water fix is money wasted, which is why my exterior chimney books exist. Inside and outside are one system.

The freeze-thaw surprise. North Texas doesn't get Minnesota winters, but it gets hard freezes — and it gets them on chimneys saturated from winter rain. Water in the tile, freeze overnight, expand, repeat a dozen times a winter. The camera shows spalled, flaking tile faces — the surface literally popping off. Homeowners are always surprised. "It doesn't get that cold here." It gets cold enough, often enough, on wet enough masonry. It counts.

Animal evidence. Texas chimneys host chimneys swifts, squirrels, raccoons — and the camera finds the nests, the debris, the droppings. A surprising number of "draft problems" are partial blockages. The fix is removal plus a good cap — the cap being exterior work, but the camera is what found the problem.

The gas-conversion flue. A lot of Texas fireplaces got converted to gas logs over the years, and the flue got ignored — "we don't burn wood anymore, so the chimney's fine." The camera often disagrees: the old creosote is still there, the old cracked tiles are still there, and gas combustion makes water

vapor and acidic condensation that attacks the flue differently but just as surely. Gas doesn't get a pass on flue condition. More on that in the next chapter.

Chapter 14: Gas Logs Don't Get a Pass

This chapter is for the "we switched to gas, so we don't worry about the chimney" homeowner. I hear it constantly. Here's why it's wrong.

Gas logs burn cleaner than wood — no creosote, less soot. That's true and it's where the complacency comes from. But gas combustion produces water vapor — a lot of it — plus carbon dioxide and trace acids. In a cool flue, that water vapor condenses on the tile walls. Year after year, the condensation works on the mortar joints and the tile, deteriorating them from the inside. The camera shows it: deteriorated joints, spalled tiles, white mineral staining — in a chimney that "never gets used hard."

And the old damage doesn't retire when you switch fuels. The cracked tiles from the wood-burning years are still cracked. The creosote glaze from before is still fuel sitting in the flue. The smoke chamber that was never parged is still rough. Switching to gas doesn't repair anything — it just changes what's attacking the flue now.

The code doesn't give gas a pass either. A gas appliance

venting into a breached flue is a carbon monoxide risk — the same as wood, because the issue isn't the fuel, it's the containment. Cracked tiles leak regardless of what's burning. If your gas-log fireplace hasn't had a camera inspection, it needs one on the same schedule as a wood burner.

There's one more gas-specific issue the camera catches: **improper conversions**. Gas logs installed in a fireplace without proper venting setup — damper clamped open the wrong amount, wrong log set for the firebox size, no carbon monoxide detector in the room. The camera sees the flue side; your eyes and a CO detector cover the rest. Every gas fireplace needs a working carbon monoxide detector in the room. That's not chimney advice, that's staying-alive advice.

Bottom line: gas means different maintenance, not no maintenance. Annual inspection, periodic camera look, and the same honest reading of what the flue is telling you.

Chapter 15: The 2026 Cost Picture — From Inspection to Reline

Let's put the whole interior-chimney price list in one place, with 2026 ranges the way the national cost data reports them.

Inspection. Level 1 with your annual sweep: \$100 to \$250. Level 2 camera inspection: \$250 to \$600, most landing \$300 to \$500. Level 3 invasive: \$600 to \$5,000-plus, rare. Book in spring or summer for the best price and the shortest wait.

Sweeping and creosote. Standard sweep: \$150 to \$375. Heavy glazed-creosote removal: \$400 to \$900 or more. The annual sweep is the cheapest line on this whole list and prevents the most expensive ones.

Smoke chamber parging. \$900 to \$2,000 for a standard chamber, hand-troweled or sprayed with refractory mortar. Best value repair in the chimney when the chamber is rough but sound.

Flue tile spot repairs. Sealing or replacing isolated tiles: a few hundred dollars per tile location, and only sensible when the rest of the flue is genuinely sound. Get the camera footage

first and count the problems — one is a repair, five is a reline.

Stainless reline. \$1,500 to \$4,000 installed for a standard residential chimney, most straightforward jobs \$2,000 to \$3,500. Height, diameter, offsets, insulation, and roof access move the number. This is the definitive fix for a breached flue and the right answer most of the time.

Cast-in-place reline. \$5,000 to \$10,000-plus. The premium buys seamlessness and structural reinforcement. Worth it when the chimney needs both.

What moves every number: chimney height (taller costs more — more material, more labor, harder access), roof steepness and height (a steep two-story roof adds real labor cost), the number of flues, how neglected the chimney is (heavy creosote or debris adds prep cost), and your region. Texas sits in the national middle on labor.

What to watch for in quotes: the liner type AND alloy, the diameter and why that diameter, insulation specified, length, warranty in writing, and whether cleaning and prep are included. Three quotes, all from the same camera footage. The quote that answers all of these without being asked is the one to beat.

Chapter 16: Hiring Right — A Sweep, Not Just a Guy With a Brush

The chimney trade has a quality spread wider than almost any trade I know. At the top: certified sweeps who run cameras, document everything, and tell you the truth including "you don't need anything." At the bottom: a guy with a brush and a scare story, selling you a reline your flue doesn't need. Here's how to hire from the top.

Certification. Look for CSIA certification — the Chimney Safety Institute of America. It's the trade's real credential, and it means the sweep passed exams on fire codes, chimney dynamics, and safety. It's not a guarantee of honesty, but it's a floor of competence. Uncertified isn't automatically bad, but certified is the safer bet.

The camera question. Ask before booking: "Do you run a camera, and do I get to see the footage?" The right answer is yes and yes. A sweep who doesn't camera-inspect is working with half the information. A sweep who cameras but won't show you the screen is selling, not inspecting.

The scare test. "Your flue is cracked, you need a \$5,000

reline immediately, and I can start tomorrow" — from a sweep who spent ten minutes in your chimney — is a sales pitch, not a diagnosis. The honest version: "Here's the footage, here are the cracked tiles at these levels, here are your options, here's what each costs, and here's my recommendation." Urgency is sometimes real — a breached flue IS urgent — but real urgency comes with video evidence and options, not pressure.

The second opinion. For any quote over a couple thousand dollars, get one. Relining is a big ticket, and the honest contractors expect you to compare. If a contractor discourages a second opinion, that's your answer about the contractor.

What the good ones do unprompted. They show you the camera feed live. They explain what you're seeing in plain language. They distinguish "needs fixing now" from "watch this." They talk about the exterior water entries they spotted. They leave you the video. And their quote is itemized — liner type, size, insulation, warranty — not a single scary number.

If you're in the DFW area and want a camera in your flue with a straight reading of what it shows, that's [chimney inspection and repair](<https://championbrickrepair.com>) — it's what we do. My

[chimney and lintel systems](<https://lintlerepair.com>) work covers the structural side when the camera finds something the chimney's bones need to answer for. And if you want to keep learning before anybody climbs your roof, my [free brick repair books](<https://metro-foundation-repair.web.app/free-books/>) cover the outside of the chimney — crowns, caps, flashing, and all the water entries the camera can't fix from inside.

The camera doesn't lie. Hire the person who'll show it to you.

Chapter 17: Questions Homeowners Ask Me

How often should I have the chimney inspected? Once a year, per the National Fire Protection Association — every chimney, wood or gas, used heavily or hardly at all. The Level 1 comes with your annual sweep. The camera Level 2 every few years, or anytime something changes: buying or selling, a chimney fire, a new appliance, new symptoms.

Can I inspect the flue myself with a phone camera? You can stick a phone up the damper and get a glimpse of the smoke chamber — and honestly, that's not nothing. But a phone can't travel the flue, can't light it properly, and can't show you the tile joints at the top. The pro camera on a long cable with its own lighting is a different instrument. DIY a peek; hire the real look.

Will a cracked flue tile set my house on fire? A cracked tile alone doesn't start fires — but it lets heat and gases reach places that can. The cracked tile plus creosote in the crack, or the cracked tile next to wood framing with no clearance, is the dangerous combination. Think of it as a failed containment, not a lit match. Fix the containment.

Does homeowners insurance cover relining? Usually not, for the same reason it doesn't cover worn-out mortar: it's maintenance and age. The exception is sudden damage — a chimney fire that's a covered event, a lightning strike, storm damage to the stack. Document everything with the camera footage if you're filing.

How long does a reline take? A standard stainless reline is typically a day or two — in from the top, connected below, sealed and capped. Cast-in-place takes longer with cure time. You can live in the house through it. The fireplace stays parked until the final inspection.

Should I just stop using the fireplace instead of relining? If the flue is breached and you don't want to fix it, then yes — stop using it, permanently, and say so. A parked fireplace with a breached flue is safe as long as nothing burns in it and it's properly closed off. What you can't do is keep burning "carefully" in a breached flue. There's no careful version of failed containment.

What's the one thing most homeowners skip? The cap. A good chimney cap — rain cover, spark arrestor, animal guard in one — costs a few hundred dollars installed and prevents the water entry that destroys flues from the top down. It's

exterior work, but it's the cheapest flue protection ever made. If your chimney has no cap, that's your next purchase after reading this book.

A Final Word Before You Call

The inside of your chimney has been working in the dark for years — taking the heat, the acid, the creosote — and it can't tell you it's hurting except through the camera. Now you know what's in there, what the camera looks for, and what each finding costs to fix.

Get the Level 2. Watch the screen with the sweep. Ask what's cracked, what's glazed, what the chamber looks like. Then fix what's actually wrong — parge the chamber, sweep the creosote, reline the breached flue — and burn your fires knowing the containment is sound.

The outside of the chimney gets all the attention. But the inside is where the fire lives. Take care of it in the dark, and it'll take care of you in the light.

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/>).