

THE HOMEOWNER'S GUIDE TO BRICK WALLS
How to Read, Repair, and Protect Your Brick
Veneer — From Stair-Step Cracks to Water
Intrusion, in Plain Texas English
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THE HOMEOWNER'S GUIDE TO BRICK WALLS

**How to Read, Repair, and Protect
Your Brick Veneer — From Stair-
Step Cracks to Water Intrusion, in
Plain Texas English**

By Travis Nech

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This book is written for general educational purposes. Every house is different. If you see signs of structural movement, water damage, or anything that concerns you, have a qualified local professional — and, where warranted, a structural engineer — look at your home in person before you act. The author is a tradesman, not a licensed engineer.

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Chapter 1: What Your Brick Is Really Doing

Walk around any brick house in Texas and you'll see the same thing: a beautiful, solid-looking wall that most people assume is holding the house up. It isn't. That is the first thing every homeowner needs to understand, and it changes how you think about every crack, every stain, and every repair quote you will ever get.

Almost every brick house built in Texas over the last fifty years is brick *veneer*. The brick is a skin — a handsome, heavy, weather-shedding

skin — but it is not
the structure of
your house. The
structure is the
wood framing (or,
in some homes,
steel or block)
behind the brick.
The brick hangs
on the outside of
that frame like a
coat hangs on a
person.

That coat is held
on by thousands of
little connectors
called **brick ties**. A
brick tie is usually
a strip of
galvanized metal:
one end is nailed
or screwed to the
wood framing, and
the other end is
embedded in the
mortar joint
between bricks.
The ties do one job
and one job only:
keep the brick skin

from falling away
from the house.
They do not hold
the house up. They
do not stop the
brick from
cracking. They
keep a very heavy
curtain attached to
the building.

Behind the brick,
between the brick
and the framing,
there is a gap —
the **air cavity**. In a
well-built wall it is
about an inch
wide. That cavity
has a job, too.
Brick absorbs
water. Every time
it rains, your brick
drinks. The cavity
lets that water
drain down the
back side of the
brick and out
through the weep
holes at the
bottom of the wall,

so it never reaches
your wood
framing. The
cavity also gives
the brick room to
move. Brick
expands in the
heat and shrinks
in the cold, and it
needs that little bit
of breathing room.

So your brick wall
is really a system
with four parts:
the brick units
themselves, the
mortar holding
them together, the
ties holding the
whole skin to the
frame, and the
cavity letting
water escape.

When something
goes wrong with a
brick wall, it is
almost always one
of those four parts
failing — a tie that
rusted through, a

cavity that got
bridged by mortar
droppings, mortar
that washed out or
was the wrong
mix, or brick that
took on more
water than it could
give back.

Understanding
this changes how
you read a crack.
When a
homeowner sees a
stair-step crack
running up the
corner of the
house, the fear is
immediate: “Is my
house falling
down?” In almost
every case, what
you are looking at
is the skin telling
you a story. The
skin moves when
the foundation
moves. The skin
cracks when the
lintel rusts. The

skin bulges when
water gets trapped
behind it. The skin
is the messenger,
not the problem.
You never fix the
messenger and
ignore the
message.

Brick ties deserve
a closer look,
because they are
the most
overlooked part of
the wall and the
cause of more
bulging walls than
anything else. Ties
were not always
installed well. In
older homes —
especially
anything built
before the
mid-1970s — ties
may be sparse,
nailed instead of
screwed, or made
of plain steel that
rusts away to

nothing. A wall
can look fine for
decades while its
ties quietly
dissolve. Then one
day you notice the
wall is leaning out
at the top, or
bowing gently in
the middle of a
long run. That is
what tie failure
looks like: the coat
slipping off the
person.

Corrugated
galvanized ties
became standard
in later years, and
modern
construction
usually calls for
one tie per every
two to three
square feet of
wall. But even
good ties can fail if
the cavity is full of
mortar. Here is
how that happens:

when the
bricklayer works,
mortar drops off
the back of the
joint and lands on
the wall ties and
flashing at the
bottom of the
cavity. A little is
normal. A lot —
and I have seen
cavities bridged
solid with a
decade of
droppings — turns
the drainage
cavity into a dam.
Water comes
down the back of
the brick, hits that
mortar dam, and
has nowhere to go.
It sits. It soaks into
the ties. It soaks
into the framing.
The wall bulges,
the ties rust, and
one day you are
looking at a repair
that costs ten
times what it

would have if the
cavity had been
kept clean.

There is a related
piece most
homeowners
never hear about:
the **shelf angle**,
sometimes called a
brick ledge. On
multi-story homes,
the brick for the
upper floors
cannot sit on the
foundation — it
needs a steel shelf,
a long angle-iron
beam bolted to the
structure, to carry
its weight. That
shelf angle is a
hardworking,
invisible part of
your house. It is
also steel, which
means it can rust,
and when it rusts
it expands, and
when it expands it
pushes the brick

above it outward.
If you have a two-
story brick home
and you see a
horizontal crack
running along the
line between the
first and second
floor, or the brick
above a window
line is pushing
outward, the shelf
angle is a suspect
worth checking.

Now, a word about
the framing
behind the brick,
because it matters
to how you think
about water. Your
brick can be
soaking wet and
your framing can
be perfectly dry —
that is the system
working. The
cavity and the
weeps are doing
their job. But if the
flashing is missing

or torn, if the
weeps are clogged
or were never
installed, or if the
mortar has
washed out of the
joints, water
crosses the cavity
and gets to the
wood. Wood that
stays wet rots.
Wood that rots
quietly behind
brick is the most
expensive kind of
damage a
homeowner can
own, because you
cannot see it until
it is far along. This
is why water
management —
not the brick itself
— is the heart of
this book.

Let me give you a
simple mental
picture to carry
through the rest of
these chapters.

Your brick wall is
a raincoat over a
wooden house.
The raincoat is
heavy and
handsome. It is
pinned to the
house with
thousands of little
pins. There is an
air gap under the
raincoat so water
can run off. At the
bottom of the
raincoat are little
drain slots. At the
top of every
opening — every
window, every
door, every garage
door — there is a
steel bar holding
the raincoat up
over the gap.
Water is always
trying to get under
the raincoat. Your
job as a
homeowner is to
keep the pins
sound, the drains

open, the bars
unrusted, and the
coat itself in good
repair.

Once you see the
wall that way,
nothing about
brick maintenance
is mysterious
anymore. Every
chapter from here
on is just one part
of that picture in
detail: how to read
what the coat is
telling you, how
the steel bars
(lintels) fail, why
mortar matters
more than brick,
where water gets
in, what the
chimney does to
the whole system,
and how to hire
someone who
actually
understands all of
this instead of
someone who just

knows how to
smear mortar in a
joint.

You do not need to
become a
bricklayer to own
a brick house. But
you do need to
understand what
your brick is really
doing. Now you
do. Let's learn to
read it. ## Chapter
2: Reading Your
Walls Like a
Tradesman

After fifty years of
looking at brick
walls, I can tell
you this: walls
talk. A tradesman
walks up to a
house and the wall
has already told
him half the story
before he ever
touches a tool.
Homeowners can
learn to hear most
of that story

themselves. This chapter is the translation guide.

Let's start with the crack everyone asks about: the **stair-step crack**. It runs up the wall in a zigzag, following the mortar joints — one joint over, one joint up, one joint over, one joint up, like a staircase. Stair-step cracks are the most common crack on Texas brick homes, and they are almost always about movement below the wall, not about the brick itself.

Here is why. Brick units are strong. Mortar is the weak link by design — it is supposed to be softer than the

brick so that when the wall has to move, the mortar gives instead of the brick shattering. When one part of the foundation settles or heaves even a little, the brick skin above it has to accommodate that movement. It does it the way the wall was designed to do it: by cracking through the mortar joints, stepping up and across. The crack is the wall relieving stress. It is doing its job.

A stair-step crack by itself is not an emergency. It is a report. The report says: "Something below me moved." Your job is to find

out what moved,
how much, and
whether it is still
moving. A hairline
stair-step crack
that has been
there for years
and never
changed is a very
different animal
from a crack that
was a hairline in
spring and is a
quarter-inch by
fall. The first one
is history. The
second one is
news.

How do you tell?
Mark it. Take a
pencil and draw a
short line across
the crack, date it,
and take a photo
with a coin or a
ruler for scale.
Check it again in a
few months. If it
hasn't moved, the
wall is telling you

about something
that happened and
finished. If it is
growing,
something is still
happening, and
you need to find
the cause —
usually foundation
movement,
drainage changes,
or soil doing what
Texas soil does.

Vertical cracks

are a different
report. A straight
vertical crack
running through
bricks and mortar
alike — not
following the
joints — is the wall
saying it is being
pulled apart. That
takes more force
than a stair-step,
because the crack
is breaking
through the brick
units themselves

instead of taking
the easy path
through the
mortar. Vertical
cracks over
windows and
doors often point
to the lintel (we'll
spend all of
Chapter 3 on that).
A vertical crack
running from a
window corner
down to the
foundation often
points to
settlement
concentrated at
one spot. Any
vertical crack that
is widening, or
that you can fit a
pencil into,
deserves a
professional look.

Horizontal cracks
are the ones that
make me sit up
straight. A long
horizontal crack

running along a
mortar joint —
especially low on
the wall, near the
foundation, or at
the level of a shelf
angle on a two-
story home —
often means the
wall is being
pushed outward
or is sliding. On
older homes it can
mean the brick
ties have failed
and the wall is
leaning. Near the
foundation it can
mean lateral
pressure from soil
or water.

Horizontal cracks
are rarer than the
other two, and
they earn a faster
phone call.

There is one more
pattern worth
knowing: the
crack that

**radiates from a
corner of a
window or door.**

Windows and doors are holes in the wall, and holes are stress concentrators — every load above the opening has to go around it. Small diagonal cracks at window corners are extremely common and often harmless, especially in older homes where a little settlement happened decades ago. But if those diagonal cracks are fresh, growing, or paired with a window that sticks or a door that won't latch, the wall is reporting active movement.

Now let's talk
about what is *not* a
crack problem.

**Hairline cracks in
mortar joints —**

the kind you have
to squint to see —
are usually
shrinkage. Mortar
shrinks a tiny bit
as it cures, and
Texas heat cycles
work it forever
after. A hairline
that doesn't grow
is cosmetic. You
can repoint it if it
bothers you, or
you can leave it. It
is not your house
falling down.

Also not a crack
problem: **a crack
that has been
cleanly repaired
and hasn't
reopened.** If a
previous owner
had a crack
tuckpointed ten

years ago and it is
still tight,
whatever caused it
stopped. That is a
good sign, not a
bad one.

Here is the
tradesman's actual
routine when he
walks a wall. He
starts at a distance
and looks at the
whole elevation —
is the wall plumb,
or does it lean? Is
there a bow in the
middle of a long
run? Then he
walks the wall
slowly, looking at
every opening:
windows, doors,
the garage.

Openings are
where cracks start.
He checks the
corners, because
corners are where
differential
movement shows

first. He looks at
the mortar: is it
recessed,
crumbling,
washed out? He
looks down at the
weep holes: are
they open? He
looks up at the
chimney and the
flashing lines. The
whole walk takes
maybe ten
minutes, and it
tells him whether
he is looking at a
maintenance job, a
repair job, or a
call-the-engineer
job.

You can do a
version of this
yourself twice a
year — spring and
fall, which
conveniently lines
up with the
maintenance
calendar in
Chapter 10. Walk

each side of your
house. Look at
every opening.
Look at the
corners. Bring
your phone and
photograph
anything that
looks new. Date
the photos. Over
the years you will
build a record of
your walls, and
that record is
worth its weight in
gold the day you
need to hire
someone —
because you will
be able to show
them exactly when
a crack appeared
and how it
changed.

Let me be direct
about when to call
a structural
engineer, because
this matters and I
don't want anyone

guessing. Call an engineer — not a contractor, an engineer — when: a crack is growing and you can measure the growth; a wall is visibly leaning, bulging, or bowing; a horizontal crack runs more than a few feet; doors and windows are sticking across the house, not just one; or you see stair-step cracking paired with interior signs like sloping floors or drywall cracks in the same area. An engineer tells you what is happening. A contractor tells you what it costs to fix it. In that order. Anyone who wants to sell you

the fix before you
know the cause is
selling, not
diagnosing.

One more thing,
and this one saves
homeowners real
money: **not every
crack needs a
repair.** I have
walked walls with
hairline stair-steps
that a homeowner
was quoted
thousands of
dollars to “fix,”
when the honest
answer was:
monitor it, keep
water away from
that corner, and
spend your money
on the gutters
instead. A
contractor who
tells you a stable
hairline crack
doesn’t need his
services today is a
contractor you

should keep. The wall will tell you if it needs help. Your job is to listen, mark, photograph, and act when the story changes. ##

Chapter 3: The Lintel Above Your Windows

Above every window, every door, and every garage door in your brick home, there is a steel bar holding up the brick. It is called a **lintel**. You almost never see it — usually just a thin dark line of steel at the top of the opening, sometimes hidden behind a row of brick. But that little bar is carrying an enormous load:

every brick above
the opening, all
the way up the
wall, rests on it.
On a two-story
home, a garage-
door lintel can be
carrying
thousands of
pounds of brick.

Lintels are the
single most
misunderstood
and most failure-
prone part of a
brick veneer wall.

I have spent a
huge portion of
my career on
lintels, because in
Texas they fail
constantly — and
when they fail, the
damage cascades.

Here is the failure
story. A lintel is
steel. Steel rusts
when it gets wet.

Lintels get wet
because they sit at

the top of
openings where
water runs off the
wall above, and
because many
were installed
with no flashing
over them, or with
paint as their only
protection. Once
the rust starts,
something
counterintuitive
happens: rust
takes up more
space than the
steel it replaces. A
rusting lintel
doesn't get thinner
and weaker first
— it gets *thicker*. It
expands. And as it
expands, it jacks
the brick above it
upward and
outward. This is
called **rust**
jacking, and it is
the signature

move of a failing
lintel.

Rust jacking shows
up in a predictable
sequence. First,
you see a
horizontal crack in
the mortar just
above the lintel —
the brick is being
lifted. Then the
crack widens.

Then the brick
above the opening
starts to shift, and
you get stair-step
cracks running up
from the corners
of the window or
door. In advanced
cases, the brick
actually displaces
— a whole section
above a garage
door can shift
outward an inch
or more. The steel
keeps expanding,
the brick keeps
moving, and

gravity keeps
pulling. It does not
get better on its
own. Ever.

The garage door
lintel is the big
one. It is the
longest span in the
house — often
sixteen feet —
carrying the
heaviest load of
brick, and it is the
most exposed to
weather. When I
get a call about a
cracked wall
above a garage
door, the lintel is
suspect number
one, two, and
three. A sixteen-
foot span of
rusting steel can
move a wall in
ways that look like
foundation failure
to an untrained
eye. I have seen
homeowners sold

foundation piers
for a problem that
was entirely a
rusted lintel. The
piers did nothing,
because the
foundation was
never the
problem. The wall
above the garage
kept cracking,
because nobody
replaced the steel.

So what does a
proper lintel
repair look like?
First, the diagnosis
has to be right: is
the lintel actually
failing, or is the
cracking from
something else? A
tradesman checks
for the tell-tale
horizontal crack
directly above the
opening, rust
staining bleeding
down from the
lintel line, and

displacement of
the brick course
sitting on the steel.
He taps the lintel
— sound steel
rings, rusted steel
thuds. He looks at
whether the
cracking pattern
centers on the
opening or runs
past it.

If the lintel is
failing, the honest
repair is
replacement, not
patching. You
cannot un-rust
steel. Grinding it
and painting it
buys a little time,
but the expansion
has already
happened and the
rust continues
underneath the
paint. The right fix
is to take the brick
down above the
opening, remove

the failed steel,
install a new
properly-sized and
properly-protected
lintel with flashing
over it, and
rebuild the brick.

That rebuild is
where most lintel
jobs go wrong, and
it is why I
eventually built
my own system. A
standard
replacement
swaps one painted
angle-iron for
another painted
angle-iron, and in
fifteen or twenty
years you're doing
it again. After
replacing enough
of them — after
seeing the same
failure on the
same houses twice
— I worked out a
better way in the
field: a purpose-

built lintel
replacement
system I call
LintelLOCK. It is
my field-
developed system
for replacing
failed lintels so the
repair outlasts the
original
construction —
proper load
handling, proper
protection, proper
flashing, and a
rebuild that
matches the
existing wall. I
don't want to turn
this chapter into a
sales pitch, but
you deserve to
know it exists,
because a lintel is
not a place to do
the cheap thing
twice.

Whether you hire
my company or
someone else, here

is what to demand
from any lintel
replacement: the
new steel must be
sized for the span
and the load — a
sixteen-foot garage
opening needs real
steel, not a light
angle. It must be
protected —
galvanized or
properly coated,
not bare steel with
a coat of paint.
There must be
flashing over the
lintel — a
waterproof
membrane that
catches water
coming down the
wall and kicks it
out over the steel,
so the new lintel
never sits in water
the way the old
one did. And the
brick must be
rebuilt with
mortar that

matches — which
is a whole craft of
its own (Chapter
4), and the reason
a lintel job done
by a crew that
doesn't
understand
mortar matching
leaves you with a
visible scar above
every opening.

A word about
painting lintels,
since every
homeowner gets
this advice
eventually:
painting the
visible face of a
lintel is fine as
maintenance. It is
not a repair. If the
steel is already
rust-jacking, paint
is a cosmetic cover
over an active
problem. And
never let anyone
caulk the gap

between the lintel
and the brick solid
— that joint needs
to stay able to
move and drain.
Caulk traps water
against the steel. I
have seen well-
meaning
handymen
accelerate a lintel
failure by
“sealing” it.

Picture a
hypothetical to tie
this together — a
composite of jobs
I’ve seen many
times, not any one
customer. A
homeowner in the
Dallas area notices
a crack above the
garage door. It is
horizontal,
running the width
of the door, with
rust staining
below it. A
foundation

company quotes
piers. A handyman
quotes a mortar
patch. The right
answer is neither:
the lintel is rust-
jacking, the brick
above the door has
lifted a half-inch,
and the fix is a
proper lintel
replacement with
flashing and a
matched rebuild.
Get the diagnosis
right and the fix is
straightforward.
Get it wrong and
you pay twice —
once for the wrong
fix, once for the
right one.

Walk your house
this weekend and
look at every lintel
line — every
window, every
door, the garage.
Look for the
horizontal crack,

the rust bleed, the
lifted brick.
Catching a lintel
early is the
difference
between a clean
replacement and a
wall rebuild. The
steel above your
openings is
holding up a lot
more than you
think. ## Chapter
4: Mortar Matters

Ask a homeowner
what holds their
brick wall together
and they'll say the
bricks. Ask a
bricklayer and
he'll tell you the
truth: the mortar
does more work
than the brick,
fails more often
than the brick, and
decides whether a
repair looks
invisible or looks
like a scar. Mortar

is the most
underappreciated
material on your
house. This
chapter is its due.

Mortar is simple
stuff — cement,
lime, sand, and
water, in
proportions that
have been refined
over centuries. But
“simple” doesn’t
mean “all the
same.” The mix
matters
enormously.

Mortar is
supposed to be
**softer than the
brick**. That sounds
backward until
you remember
Chapter 2: when
the wall moves,
the mortar is
designed to give. If
the mortar is
harder than the
brick — and this

happens all the
time with modern
high-strength
mixes used on
older, softer brick
— the wall can't
relieve stress
through the joints.
So it relieves it
through the brick.
The faces pop off
the bricks. The
wall spalls. A too-
hard mortar
literally destroys
the brick it was
supposed to
protect.

This is the first
rule of mortar
work: **match the
strength, not just
the color.** The old
rule of thumb is
that the mortar
should be no
harder than the
masonry units it
joins. On a 1960s
home with soft,

porous brick, the original mortar was probably a lime-rich, relatively soft mix. Smearing modern Type S mortar — the strong stuff — into those joints is one of the most common ways a “repair” becomes damage. A good mason knows the wall’s era and matches accordingly. A bad one uses whatever is in the truck.

The second rule is about **color**, and this is where homeowners get burned most visibly. Mortar color comes from the sand, the cement, and the pigments — and it changes as it cures

and as it weathers.

A repair that
matches perfectly
on day one can be
two shades off by
month six if the
mix wasn't right,
because the new
mortar weathers
differently than
the thirty-year-old
mortar around it.
And a repair that
is close-but-not-
quite is worse
than no repair at
all in one specific
way: your eye goes
straight to it. A
mismatched
mortar joint above
a garage door
screams "repair"
from the curb. It
drags down the
look of the whole
house.

Real mortar
matching is a
craft. It starts with

reading the
existing mortar: its
color when dry, its
texture, its
aggregate — the
little grains of
sand visible in the
joint. A good
matcher takes a
sample, works up
test batches, lets
them cure, and
compares them
dry, in daylight,
against the wall. It
is iterative. It takes
patience. The
crews that do it
well treat it like
what it is: color
science done with
sand and cement.

This is the
problem I built
MortarMagic to
solve. After
decades of
watching repairs
fail the eye test —
good structural

work ruined by
mortar that didn't
match — I put
together a system
for mortar color
matching that
takes the
guesswork out: a
method for
reading the
existing mortar,
matching it
precisely, and
even a take-home
Mortar Bucket
setup so the color
stays consistent
across a whole job.
The goal is simple:
when the repair is
done, you
shouldn't be able
to find it. The wall
should read as one
wall, not a wall
with a patch.

Now the
vocabulary,
because
contractors will

use these words
and you should
know what they
mean. **Repointing**
is the full process:
cutting or raking
out deteriorated
mortar to a proper
depth and packing
in new mortar.

Tuckpointing
originally meant a
specific decorative
technique, but in
common
American usage —
especially in Texas
— it has become
the everyday word
for repointing:
removing bad
joints and putting
in good ones.

When a contractor
says “tuckpoint,”
he almost always
means repoint.

The key question
isn't the word. It's
the depth: mortar
should be

removed to a depth of at least twice the width of the joint (usually around half an inch to three-quarters of an inch) before new mortar goes in. A skim coat — smearing new mortar over old — is not repointing. It will fall out, usually within a couple of seasons, and it traps moisture behind it in the meantime.

How do you know your mortar needs attention? The tests are simple. Run a key or a screwdriver along a joint — if the mortar crumbles, powders, or flakes out, it's deteriorated. Look

for joints that are recessed deeply behind the face of the brick — that's mortar that has washed out over the years. Look for white crusty buildup (that's efflorescence, Chapter 8) and for joints that are cracked through. A little deterioration at the surface is normal aging. Mortar that you can dig out with your finger is a wall asking for repointing.

One more mortar truth that surprises people: **mortar needs water to cure, and Texas heat is its enemy.** Mortar that dries too fast doesn't reach its

strength — the
cement needs
sustained
moisture to
hydrate properly.
That's why good
masons work in
the cooler hours in
summer, mist their
work, and cover it.
A repointing job
done at 3 PM in
August, baked dry
in an hour, is a
compromised job.
If your contractor
is packing joints in
the brutal
afternoon heat
with no
protection, that's a
red flag — and
Chapter 9 has the
full list.

Let me also
address the
question I get
constantly: can
you just seal the
mortar instead of

repointing it?
Sealers have their
place — we'll talk
about water
repellents in
Chapter 5 — but a
sealer over failed
mortar is paint
over rot. The
mortar is the
wall's gasket.
When the gasket is
gone, no coating
replaces it.
Repoint first, then
talk about
protection.

Here's a
hypothetical to
make it concrete
— a composite, not
any real customer.
A homeowner has
a 1970s brick
home with soft,
sandy brick. The
mortar is
crumbling at the
corners.

Contractor A

quotes a repoint
with a standard
modern mortar
mix, close-enough
color, done in a
day. Contractor B
takes a sample,
talks about
matching the
original lime-rich
mix, and quotes
more. Contractor
A is cheaper.
Contractor A is
also going to
destroy that wall
within a decade:
the hard mortar
will force every
future movement
through the soft
brick, popping
faces off across the
whole elevation,
and the color will
never match.
Contractor B costs
more because he's
doing it right.
Mortar is the one
place on a brick

wall where the
cheapest bid is
almost always the
most expensive
job.

Your mortar is
talking to you
every time you
walk the wall. Run
the key test this
spring.

Photograph the
joints. And when
the time comes to
repoint, hire the
craft — not the
caulk gun. ##

Chapter 5: Water
Is the Enemy

If this book had
one sentence, it
would be this:

**water destroys
brick houses, and
almost never in
the way
homeowners
expect.** Not in a
dramatic flood.
Not in a single

storm. Slowly,
invisibly, one
raindrop at a time,
working its way
into places you
can't see until the
damage is done.
Everything in this
chapter is about
understanding
that slow war —
because once you
understand it,
every
maintenance
decision gets
obvious.

Start with the
basic fact: **brick is
a sponge.** A
standard clay
brick can absorb a
remarkable
amount of water
— up to 10 or even
20 percent of its
weight in some
types. When rain
hits your wall, the
brick drinks. In a

light rain, it drinks
a little and dries
out between
storms. In a
driving Texas
thunderstorm —
the kind that
comes sideways
off the plains — it
drinks deeply. The
wall is designed
for this. The cavity
behind the brick,
the flashing, and
the weep holes
exist precisely
because the
designers knew
the brick would
get saturated and
needed a way to
shed that water.

The system works
like this. Rain hits
the brick. Some
runs down the
face. Some soaks
in. The soaked
water migrates
through the brick

toward the back
face — water
always moves
from wet to dry,
from outside to
the drier cavity. It
reaches the back
of the brick and
runs down the
cavity, the way
rain runs down
the inside of a
raincoat. At the
bottom of the wall,
flashing — a
waterproof
membrane —
catches that water
and directs it out
through the **weep
holes**, those little
gaps in the vertical
mortar joints at
the base of the
wall. Water in,
water out. The
framing stays dry.
That is the whole
design, and when
every part works,
it works

beautifully for
decades.

Now here is how it
fails, part by part
— because it
always fails at the
parts, never at the
brick itself.

Flashing failures.

Flashing is the
waterproof layer
at the base of the
wall, over every
lintel, around
every window and
door, and
wherever the
brick meets a roof.

It is also the part
most often
installed wrong or
left out entirely.

On older homes,
flashing over
lintels is
frequently missing
— the builder just
set the steel and
bricked over it.

Without flashing,

water running
down the cavity
hits the back of the
lintel and sits on
the steel.

Remember

Chapter 3: that's
how lintels die.

Around windows,
missing or torn
flashing lets water
bypass the brick
entirely and go
straight to the
framing. Flashing
is invisible when
it's right and
catastrophic when
it's wrong.

Weep hole

failures. Weep
holes are small —
just an open
vertical joint,
sometimes with a
little tube or rope
wick in it — and
they clog with
astonishing ease.
Mortar droppings

from construction.
Dirt daubers and
insects. Mulch
piled against the
wall by a well-
meaning
landscaper. Paint
— I have seen
entire walls where
a painter caulked
or painted every
weep hole shut,
“sealing” the wall.
A wall with no
working weeps is
a bathtub: water
comes down the
cavity and has
nowhere to go. It
pools at the base,
saturates the
bottom courses of
brick, wicks into
the framing, and
rots the sill plate
— the wooden
board your whole
wall framing sits
on. Rotted sill
plates are among
the most

expensive repairs
in this business,
and they start with
a ten-cent weep
hole full of mud.

Cap and coping failures. The top
of every wall
needs a cap that
sheds water. On a
brick veneer
home, that's
usually the roof
overhang and the
flashing where the
wall meets the
roof. On parapets,
garden walls, and
chimneys, it's a
concrete or stone
cap. Water that
gets into the top of
a wall travels
down *inside* it, and
interior water is
the hardest to
trace — it can
show up as
damage ten feet
from where it

entered. A cracked chimney crown (Chapter 6) is the classic version: water enters the top of the chimney and appears as a stain on a ceiling two rooms away.

The science of saturation is worth understanding because it explains the freeze damage we'll cover in Chapter 8. When brick is saturated and the temperature drops below freezing, the water inside the brick expands — about 9 percent by volume. That expansion has to go somewhere. If the brick's pores can't accommodate it,

the face of the
brick pops off.
That's spalling,
and it's physics,
not a defect. North
Texas gets enough
freeze cycles every
winter to destroy
saturated brick
over a few
seasons. The
defense is never
letting the brick
stay saturated:
keep the water
moving out as fast
as it comes in.

So what does
water defense look
like in practice?
It's unglamorous,
and that's the
point. **Gutters** that
actually move
water away from
the wall — not
dumping it at the
foundation, not
overflowing
behind the fascia.

Grading that slopes away from the house — six inches of fall in the first ten feet is the standard, and it's the cheapest foundation and wall protection you can buy. **Weep holes** kept open — walk them twice a year with a piece of wire. **Flashing** intact wherever you can see it.

Caulk joints around windows and doors maintained — caulk is a maintenance item, not a permanent seal; it fails every 5 to 10 years in Texas sun and needs renewal.

And then there's the question of **water repellents**

— the sealers sold
to homeowners as
brick

waterproofing.

Here's the honest
tradesman's take:
a good breathable
masonry water
repellent (silane/
siloxane type) can
reduce how much
water the brick
absorbs, and on
the right wall it's
worthwhile. But
“breathable” is
doing heavy work
in that sentence. A
cheap sealer that
traps moisture
inside the wall is
worse than
nothing — it
prevents the brick
from drying,
which accelerates
freeze damage and
spalls the face.
Never seal a wall
that has active
water problems

behind it. Fix the
flashing, open the
weepers, repoint the
failed joints —
then, on a sound
wall, a quality
repellent is a
reasonable extra
layer. Applied in
the wrong order,
it's a moisture trap
with a marketing
budget.

Let me give you
the water
walkthrough — a
hypothetical
composite. A
homeowner
notices a musty
smell in a
downstairs
bedroom on an
exterior wall. No
visible leak. The
wall looks fine.
Here's the
sequence a
tradesman runs:
check the gutters

above that wall
(overflowing?
dumping at the
corner?). Check
the grading (does
water pool against
the brick there?).
Check the weep
holes at the base
of that wall (open?
clogged? buried in
mulch?). Check the
window above
(caulk failed?
flashing?). Check
inside — pull the
baseboard if
needed (is the
drywall damp at
the bottom?). In
nine cases out of
ten, the answer is
one of the boring
ones: a clogged
gutter, a buried
weep, a failed
bead of caulk.
Water is the
enemy, but it's a
lazy enemy — it
takes the easiest

path, and the
easiest path is
usually the
maintenance you
skipped.

One last water
truth, and it's
about time. Water
damage is
**cumulative and
quiet.** A wall can
take on a little
water behind the
brick for years
with no visible
sign, while the ties
rust, the sheathing
softens, and the
sill plate darkens.
By the time you
see something — a
stain, a bulge, a
soft spot — the
water has been
winning for a long
time. That's not a
reason to panic.
It's a reason for
the twice-a-year
walk in Chapter

10. The
homeowner who
looks, finds things
early. The
homeowner who
doesn't, finds them
expensively. ##

Chapter 6: Chimneys: The Tallest Liability on Your House

Your chimney is
the most exposed
piece of masonry
on your property.
It sticks up above
the roofline into
the worst weather
— driving rain,
hail, baking sun,
freeze cycles —
with no overhang
to protect it, and it
takes the full force
of everything the
sky delivers. It is
also the part of the
house
homeowners look
at the least. That

combination —
maximum
exposure,
minimum
attention — makes
the chimney the
tallest liability on
the house. More
brick repair
money is spent on
chimneys than on
any other single
element.

A chimney is a
small system with
four critical parts,
and they fail in a
predictable order.

The crown. The
concrete cap at the
very top of the
chimney — the
part the flue pipes
stick through — is
called the crown.
Its job is to shed
water off the top
of the chimney the
way a roof sheds
water off a house.

Most crowns fail
because they were
built wrong from
the start: a thin
skim of mortar,
flat or even dished
so water pools,
with no overhang
past the brick. A
proper crown is a
solid slab of
concrete — not
mortar — at least
two inches thick at
its thinnest, sloped
to shed water,
overhanging the
brick by an inch or
two on every side,
with a drip edge.
What most Texas
homes actually
have is a half-inch
mortar wash that
cracked in the first
five years. Every
crack in that
crown is a direct
pipeline for water
into the core of the
chimney. From

there it travels
down inside the
brickwork, and —
as Chapter 5
warned — interior
water shows up
far from where it
entered: stained
ceilings, damp
fireboxes, spalled
brick halfway
down the chase.

The cap. Sitting on
the flue (or flues)
at the top is the
chimney cap —
the little metal
roof on legs. Its job
is to keep rain out
of the flue and
animals out of the
chimney. A
missing or rusted-
out cap lets water
pour straight
down the flue,
where it attacks
the flue liner, the
smoke chamber,
and the firebox

from the inside.
Caps are cheap.
The damage from
not having one is
not. If your
chimney has no
cap, that is a same-
month fix, not a
someday fix.

The flashing.

Where the
chimney passes
through the roof,
there is a two-part
flashing system:
step flashing
woven into the
shingles up the
sides, and counter-
flashing
embedded into the
chimney's mortar
joints, folded
down over the
step flashing. This
is precision work
— the counter-
flashing has to be
reglet-cut into the
mortar joint, not

just caulked to the brick face. And it is one of the most commonly botched details in residential construction. The failure mode is depressingly common: a roofer replaces the shingles, doesn't properly integrate with the chimney flashing, and seals the joint with a fat bead of caulk or roofing tar. That lasts a few years. Then it cracks, water runs down the side of the chimney behind the flashing, and it enters the house at the roofline — often appearing as a leak that the homeowner (and sometimes the roofer) blames on

the roof. Chimney
flashing leaks are
chimney problems
wearing a roof
disguise.

**The brick and
mortar of the
chase itself.** The
chimney's
brickwork
weathers faster
than any other
brick on the house
because nothing
shields it. Mortar
joints at the top
courses
deteriorate first.
Spalling — the
freeze-pop of brick
faces — starts at
the chimney and
works down. I've
seen chimneys
where the top six
courses were
essentially loose,
held together by
habit, while the
walls of the house

below were
perfectly sound. A
chimney rebuild
from the roofline
up is one of the
most common
major masonry
jobs in Texas, and
it is almost always
preventable with
earlier
maintenance:
crown repair,
repointing, and a
breathable water
repellent on a
sound chimney.

Here's how to read
your chimney
without climbing
on the roof — and
please don't climb
on the roof; use
binoculars from
the ground, or a
drone photo, or
pay a tradesman
for ten minutes of
his eyes. Look at
the crown: can

you see cracks? Is
it flat or dished?
Look at the top
courses of brick:
are faces popping
off? Is the mortar
washed out? Look
at the flashing line
where the
chimney meets the
roof: is there tar
smeared
everywhere (a
sign of past leaks
“repaired” with
goop)? Is the metal
rusted through?
Look for a cap: is
there one? Is it
intact? Then go
inside: look at the
ceiling around the
chimney, look in
the attic at the
chimney’s roof
penetration, and
look in the firebox
for dampness or
white salt staining.
Water leaves a

trail if you know
where to look.

A note on

**chimney fires
and liners,**

because a
masonry book that
ignores the inside
of the chimney is
only doing half the
job. The flue liner
— clay tile in most
Texas chimneys —
contains the heat
and the
combustion gases.
Cracked liners let
heat reach the
wood framing
around the
chimney, which is
a fire hazard, and
let moisture attack
the brickwork
from the inside. If
you burn wood
regularly, have the
chimney inspected
and swept on a
schedule — that's

a chimney sweep's
trade, not a
bricklayer's, and a
good sweep will
tell you the
condition of your
liner. Masonry and
fire safety meet at
the liner. Respect
both.

Let me sketch the
classic
hypothetical — a
composite of
dozens of real
calls. A
homeowner
notices a water
stain on the living
room ceiling, near
but not at the
fireplace. A roofer
comes out, finds
nothing obvious,
smears tar around
the chimney base,
charges for the
visit. The stain
comes back with
the next hard rain.

The actual problem, visible from the ground with binoculars: the chimney crown is a cracked mortar wash, and water is entering the top of the chimney, traveling down inside the brickwork, and exiting at the ceiling framing where the chimney passes through. The fix isn't roofing tar. It's a proper concrete crown, repointing the top courses, and correct counter-flashing. Total cost: real money, but a fraction of what years of interior water damage would cost — and a fraction of what a

full chimney
rebuild costs once
the top courses
give up.

The maintenance
calendar in
Chapter 10 puts
the chimney on
the fall checklist,
before the burning
season and before
winter rains. But
honestly, the best
time to look at
your chimney is
right now — today,
with binoculars,
from your
driveway. The
tallest liability on
your house
deserves ten
minutes of your
attention. ##

Chapter 7: The
Slab Edge and the
Weep Holes

Get down low and
look at the bottom
of your brick wall

— really look, at ground level, where the brick meets the foundation. This unglamorous six-inch strip of your house tells you more about its water health than almost anything else. It is where the drainage system exits, where the grading meets the wall, and where the most preventable damage in brick homeownership quietly begins.

What you're looking at is the **slab edge** — the exposed face of your concrete foundation — with the brick veneer starting a few inches above it. In

proper
construction,
there's a visible
band of concrete
between the soil
and the first
course of brick,
usually four to six
inches. That
exposure is
deliberate.

Concrete at grade
takes the splash-
back, the mulch,
the weed-eater
abuse, so the brick
doesn't have to.

The day that slab
edge disappears
under soil or
mulch, your wall's
drainage system
starts drowning.

Right above the
slab edge, in the
first or second
course of brick,
you should find
the **weep holes** —
open vertical

joints, spaced
every couple of
feet, sometimes
fitted with little
plastic tubes or
rope wicks. We
covered their job
in Chapter 5:
they're the drain
slots at the bottom
of the raincoat.
Everything in this
chapter is about
keeping those slots
working and that
slab edge exposed,
because together
they're the wall's
last line of
defense.

Let's talk about
what kills weep
holes, because the
list is long and
almost all of it is
well-intentioned.

Mulch and soil
are the number
one killer. A
homeowner builds

up the flower bed,
year after year of
fresh mulch, and
slowly the grade
rises until it buries
the weep holes
and laps against
the brick. Now
water can't drain
out — worse, soil
holds moisture
directly against
the brick and
wicks it upward,
and termites get a
hidden highway
into the framing
behind the veneer.
The rule is simple
and non-
negotiable: **keep
soil and mulch at
least four inches
below the weep
holes**, and never
let grade touch the
brick. If your beds
have crept up over
the years, dig
them back down.
It's free and it

matters more than
most paid repairs.

**Landscaping
fabric, edging,
and grading** come

next. I see beds
where the
homeowner did
everything right
with the plants
and everything
wrong with the
water: the bed
slopes *toward* the
house, the edging
dams water
against the wall,
and the weeps sit
in a permanent
puddle after every
rain. Water pooled
against the base of
a brick wall will
find its way in —
through the weeps
(backwards),
through the
mortar, through
any gap at all.
Your beds should

slope away from
the house, and
downspout
extensions should
carry roof water
past the beds
entirely, not into
them.

Painters are the
number two killer
of weep holes, and
they don't mean it
either. A painter
spraying a house
— or worse,
spraying the brick
itself — fills or
bridges every
weep hole without
a second thought.
A painted-shut
weep is a sealed
drain. If you're
having any
painting done,
walk the wall with
the painter first
and point at the
weeps: these stay
open. Tape them if

you have to. Same
goes for **caulk**: no
one should ever
caulk a weep hole.
I've pulled caulk
out of weeps on
houses less than
five years old, put
there by someone
who thought they
were "sealing out
water." They were
sealing *in* water.

**Insects and
debris** handle the
rest. Mud daubers
love a weep hole
— it's a perfect
little tunnel.
Spiders, dirt, and
mortar crumbs
from construction
all contribute. This
is why the twice-a-
year walk includes
the weeps: a
straightened piece
of wire or a small
bottle brush, hole
by hole, takes ten

minutes and keeps the whole drainage system alive. If a weep is packed solid with mortar from original construction, a mason can carefully open it — but most are just dirty, not defective.

Now the slab edge itself. Walk it and look for three things. First, **exposure**: can you see four-plus inches of concrete all the way around? Where you can't, that's a grade correction waiting to happen. Second, **cracking and spalling of the concrete**: hairline cracks in a slab edge are

usually shrinkage
and harmless, but
flaking, crumbling
concrete at grade
— especially with
rust staining —
can mean the steel
reinforcement
inside is
corroding, often
from years of
standing water or
sprinkler spray.

Third, **the brick-
to-slab joint:**

there should be a
clean line where
the brick starts. If
you see mortar
smeared down
over the slab edge,
or the bottom
brick course
sitting *in* the dirt,
the original
drainage detail is
compromised.

A special Texas
note: **sprinkler
heads** aimed at

the wall. I see this
constantly — a
rotor head
throwing water
directly against
the brick, day after
day, year after
year. That wall
stays saturated.
The weeps can't
keep up.

Efflorescence
blooms, mortar
softens, and in
winter the freeze
cycles go to work.
Walk your
sprinkler zones
while they run,
once, and redirect
anything hitting
the house. It's a
five-minute fix
that saves a wall.

And **gutter
downspouts:**
every downspout
should discharge
at least four to six
feet from the

foundation, onto
grade that slopes
away. A
downspout
dumping at the
corner saturates
the soil, and
saturated soil
against the slab
edge means
hydrostatic
pressure pushing
water toward
every tiny gap.
Extensions are
cheap. Use them.

Here's the
composite
hypothetical for
this chapter. A
homeowner calls
about dampness at
the base of an
interior wall and a
musty smell. The
brick outside looks
fine. The
investigation
finds: flower beds
built up eight

inches over a decade, burying the weeps; mulch piled against the brick; a downspout discharging into the bed; and sprinkler heads soaking the wall every morning. No structural failure. No bad brick. Just a drainage system that was slowly buried and overwhelmed. The fix: regrade the beds, expose the slab edge, clear the weeps, extend the downspouts, redirect two sprinkler heads. Total cost: a weekend and a few bags of mulch moved *away* from the house. The most expensive problems in this

chapter are the
ones nobody looks
at until they smell
them.

Get down low this
weekend. Look at
your slab edge.

Count your weep
holes. Poke them
with a wire. The
bottom six inches
of your wall is
doing more work
than the top six
feet — treat it that
way. ## Chapter 8:
Efflorescence,
Spalling, and What
Your Wall Is
Telling You

Brick walls
develop symptoms
the way people do
— visible signs of
invisible
processes. A white
crust blooming
across the brick. A
brick face flaking
off like a bad

sunburn. A dark stain that never dries.

Homeowners see these and ask the wrong question: “How do I clean this off?” The right question is: “What is my wall trying to tell me?” This chapter is the symptom guide.

Efflorescence — that white, powdery, sometimes crusty deposit on brick and mortar — is the most common symptom and the most misunderstood.

Here’s what’s actually happening. Brick, mortar, and concrete all contain soluble salts. When water

moves through the
masonry, it
dissolves those
salts and carries
them along. When
the water reaches
the surface and
evaporates, the
salts stay behind
— as that white
bloom.

Efflorescence is
not a stain *on* the
wall. It is evidence
of water *moving*
through the wall.

That distinction is
everything. Light,
patchy
efflorescence that
appears after a
wet season and
fades in dry
weather is usually
harmless — it's the
wall breathing out
a little salt. But
heavy, persistent
efflorescence —
thick crusts, large

areas, returning
again and again —
is a water report.

It says water is
entering the wall
somewhere and
traveling through
it in volume. Don't
just brush it off;
find the water.

Check the usual
suspects from
Chapter 5:
flashing, weeps,
grading, gutters,
sprinklers. The
salt is the
messenger. The
water is the
message.

There's a nastier
cousin called
cryptoflorescence
(or
subflorescence):
salts crystallizing
behind the surface
instead of on it —
inside the brick's
pores, just under

the face. You can't
see it happening.
What you see is
the result: the
brick face pops off.
Salt crystals
expand as they
grow, and that
expansion exerts
real force inside
the brick. A wall
can look fine while
cryptoflorescence
quietly
undermines the
faces of its bricks,
until one freeze
cycle or one more
salt load finishes
the job. If you're
seeing spalling
(below) paired
with heavy salt
deposits, this is
likely part of the
story.

Spalling is the
flaking, popping,
or crumbling of
the brick face

itself. The brick
looks like it's
shedding — thin
layers peeling off,
corners breaking
away, faces
crumbling to
expose the softer
interior. Spalling
has three main
causes, and telling
them apart
matters because
the fixes differ.

Cause one: **freeze-thaw damage**. As
Chapter 5
explained,
saturated brick
that freezes
expands
internally, and the
face lets go. This is
the big one in
North Texas,
where we get
repeated freeze
cycles every
winter. The
pattern is

diagnostic:
spalling worst on
the most exposed
elevations (north
and east walls that
stay damp
longest), worst
near the ground
(splash-back
saturation), worst
on chimneys
(Chapter 6). The
fix is water
management —
the wall must be
allowed to dry. You
cannot seal your
way out of freeze
spalling; in fact,
the wrong sealer
makes it worse by
trapping water
inside.

Cause two: **too-hard mortar**
(Chapter 4's
warning come to
life). When hard
modern mortar
meets soft older

brick, movement
stresses
concentrate in the
brick, and the
faces pop. The
pattern: spalling
concentrated
around repointed
joints, on walls
where someone
“repaired” the
mortar with the
wrong mix. The fix
is eventual
repointing with
the correct softer
mortar — and a
hard lesson about
hiring the craft.

Cause three:

**manufacturing or
material issues** —

brick that was
underfired or
made with the
wrong clay, which
never had the
durability it
needed. This
shows as spalling

across a whole
elevation or a
whole house,
uniform,
regardless of
exposure. It's
rarer, and there's
no fix except
replacement of the
affected brick —
which is why brick
selection matters
on new
construction and
additions.

**Dark staining and
green growth** are
simpler reports.
Black or dark
streaks below a
window sill, under
a gutter, or
beneath a flashing
line usually mean
water is running
down the face in a
concentrated path
— often a failed
drip edge, a
clogged gutter

overflowing, or
flashing dumping
water onto the
wall instead of
away from it.
Green algae or
moss means
chronic dampness
and shade — the
wall never fully
dries. Both are
water-path maps:
follow the stain
uphill to find
where the water
starts.

Rust staining
bleeding from a
lintel line, a shelf
angle, or around
wall ties is the
steel report:
something metal
in or behind the
wall is corroding.
At a lintel, it
confirms Chapter
3's diagnosis.
Elsewhere, it can
mean failing ties

or flashing. Rust stains don't wash off easily and they don't lie — find the steel.

Now, the cleaning question every homeowner asks: can I pressure-wash it? Here's the tradesman's answer: **pressure washing brick is surgery with a fire hose.** A careful, low-pressure wash with the right detergent can clean a sound wall safely. But high pressure drives water deep into the brick and mortar — saturating the wall you're trying to protect — and it can cut the face off soft brick and

blast the mortar
out of joints. I've
seen more walls
damaged by
enthusiastic
pressure washing
than by a decade
of weather. If you
hire it done, the
operator should be
using low pressure
(think garden-
hose-plus, not
paint-stripper), a
wide fan tip, kept
moving, never
aimed into joints.
And never
pressure-wash a
wall with spalling,
soft mortar, or
known water
problems — you'll
make all three
worse.

What about the
white
efflorescence —
can you just clean
it? Light

efflorescence often
brushes off dry
with a stiff brush.
For heavier
deposits, there are
masonry cleaners,
but here's the
caution: acid-
based cleaners
(even mild ones)
can burn the
mortar, change its
color, and drive
salts deeper if
misused. On a wall
with sound
mortar, a careful
cleaning is fine.
But remember the
rule: **cleaning**
treats the
symptom. If the
efflorescence
comes back, the
water is still
moving, and no
cleaner fixes that.
Find the water
first, clean second.

Let me close with
the diagnostic
mindset, because
that's what this
chapter is really
teaching. Your
wall is always
reporting. White
bloom: water
moving through.
Flaking faces:
freeze damage,
wrong mortar, or
bad brick — check
the pattern. Dark
streaks: follow
them uphill. Rust:
find the steel.
Green: find the
shade and the
damp. None of
these are
emergencies on
day one. All of
them are early
warnings. The
homeowner who
reads the
symptoms in year
one spends

maintenance
money. The
homeowner who
scrubs the
symptom and
ignores the cause
spends repair
money in year
five. The wall is
talking. This
chapter taught you
the language. ##

Chapter 9: Hiring a Brick Contractor Without Getting Burned

Everything in this
book has been
building your
ability to
understand your
walls. This chapter
is about the
moment you hand
that
understanding to
someone else —
the moment you
hire a contractor.
I've been on the

contractor side of
that handshake for
fifty years, and I'm
going to tell you
exactly how the
good ones operate,
how the bad ones
operate, and how
to tell them apart
before money
changes hands.

Start with this
truth: **masonry is
a trade where the
quality is
invisible at first
and obvious**

forever. A bad
paint job looks bad
on day one. A bad
brick repair can
look fine on day
one and fail in
year three —
wrong mortar, no
flashing, buried
weeps — long
after the check
cleared. That time
delay is what the

bad operators
count on. Your
defense is process:
how you find
them, what you
ask, and what the
estimate looks like.

**Finding
candidates.** The
best source is still
a referral from
someone whose
wall you can go
look at. Not “he
did great work” —
go *look* at the
work. Is the
mortar matched?
Are the joints
clean? Is the site
clean? A repair
from three years
ago tells you more
than a repair from
three weeks ago.
Beyond referrals,
look for
contractors who
specialize in what
you need. Brick

repair is not
general handyman
work and not
general
remodeling — you
want someone
who does masonry
every week. Check
how long they've
been at it, and
whether they
carry proper
insurance. In
Texas, there's no
state license for
bricklayers, which
means *you* are the
licensing board.
Act like it.

The estimate visit
is the interview,
and you should
treat it that way. A
good mason walks
the wall the way
Chapter 2 taught
you — slowly,
looking at
openings, corners,
weeps, lintels. He

asks questions:
when did you first
notice it? Has it
changed? Any
water issues? Any
foundation work?
He's diagnosing
before he's
pricing. Watch for
the opposite: the
guy who glances at
the wall for thirty
seconds and starts
talking price. He's
not diagnosing.
He's selling.

**Questions to ask
every candidate:**

1. "What do you
think is causing
this?" — You're
listening for a
diagnosis, not just
a repair
description. If he
can't explain the
cause, he can't fix
it properly. 2.
"What mortar mix
will you use, and

how will you
match the color?”

— The answer
should mention
matching the
existing mortar’s
strength and color,
not just “mortar.”

Vague answers
here are a red flag.

3. “How will you
handle flashing
and water
management in
this repair?” —

Any repair that
opens a wall and
doesn’t address
flashing is
incomplete. 4.

“Can I see a repair
you did at least
two years ago?” —

Time is the only
honest inspector.

5. “What’s your
cleanup process?”

— Mortar splatter
on windows,
stained concrete,
debris in the beds

— a pro leaves the site cleaner than he found it. 6.

“What happens if you open the wall and find something worse?” — You’re checking for honesty about unknowns, not a lowball that explodes later.

Red flags — any one of these is enough to keep looking:

- **The price is dramatically lower than everyone else.** In masonry, the cheap bid cuts something you can’t see: mortar quality, flashing, depth of repointing, cleanup, insurance. The

cheapest bid is the most expensive job (Chapter 4's lesson, repeated because it keeps being true). - **Full payment upfront.**

A deposit for materials is normal. Full payment before work starts is not.

- **"We don't need to pull the brick, we can fix it from the outside."**

Sometimes true for surface repointing. Never true for a failed lintel, failed ties, or anything structural. Be skeptical. - **No interest in the cause.** If he won't discuss *why* it failed, he's planning to repeat the failure. -

Pressure tactics.

“This price is only good today.” A real tradesman with real backlog doesn’t need your signature today. -

He badmouths every competitor by name.

Confidence is quiet. Desperation is loud. - **Cash-**

only, no

paperwork. No written scope, no warranty terms, no insurance certificate — you’re not hiring a contractor, you’re hiring a risk.

What a good written estimate includes: a clear description of the work (what’s being removed, what’s being installed, how deep the

repointing goes),
the mortar
approach (mix
type and color-
matching method),
flashing details
where applicable,
start and
completion
expectations,
payment schedule
tied to progress,
warranty terms in
writing, and proof
of insurance. If it's
a paragraph and a
price, it's not an
estimate — it's a
guess with a
number on it.

About

warranties: a
warranty is only
as good as the
company behind
it. A “lifetime
warranty” from a
one-truck
operation that's
been around

eighteen months is marketing. Ask how long they've been in business under the same name, and what the warranty actually covers — materials, labor, both? What voids it? A short, honest warranty from a fifty-year company beats a grand promise from a ghost.

Now, since this is my book, let me tell you plainly **how Champion Brick Repair works** — not as a pitch, but so you know what a serious masonry outfit's process looks like, and you can hold any contractor to the same standard.

It starts with the
call or the website
visit. You'll talk to
a real person who
knows brick — not
a call center
reading a script.
We ask about what
you're seeing,
when it started,
and whether
there's been any
foundation work
or water issues,
because context
matters before
anyone drives out.

The site visit is a
diagnosis first. We
walk the walls the
way this book
taught you —
openings, corners,
lintels, weeps,
mortar, flashing.
We photograph
everything. We tell
you what we think
is causing it, in
plain language,

and we show you.
If the honest
answer is “this
doesn’t need us
yet — monitor it,”
that’s what you’ll
hear. I’d rather
have you call us
back in two years
than sell you a
repair you don’t
need today.

The estimate is
written and
specific: scope,
mortar matching
approach, flashing
details, schedule,
price. No vague
line items. If
opening the wall
might reveal more
— and with older
homes it
sometimes does —
we tell you that
upfront and
explain how we’ll
handle it, rather

than surprising
you mid-job.

On the job, the
things that don't
show in the
finished photo get
the same care as
the things that do:
proper mortar
depth, correct mix
for your wall's era,
flashing installed
right, weeps kept
open, ties checked
where we're in the
wall. Mortar color
matching gets the
full treatment —
test batches, cured
comparisons,
daylight checks —
because a repair
you can spot from
the curb is a
repair we didn't
finish. And the site
gets cleaned like it
matters, because
your home isn't

our workshop —
it's where you live.

After the job, you
get the warranty
in writing and a
straight answer
about
maintenance:
what to watch,
when to call. And
if something we
did isn't right, we
come back. That's
the whole business
model — have
been for years,
across thousands
of walls in Dallas–
Fort Worth.

Whether you call
us or someone
else, hold every
contractor to this
standard:
diagnosis before
price, written
scope, mortar
craft, water
management,
cleanup, and a

warranty from a company that'll still be here. The wall will be there for decades. Make sure the work is, too. ## Chapter 10: The Maintenance Calendar

Here is the secret the whole book has been pointing at: **almost every expensive brick repair started as cheap maintenance that didn't happen.**

The wall gives you years of warning. The weep clogs slowly. The caulk fails gradually. The crown cracks a little more each season. A homeowner with a calendar and an hour twice a year catches nearly all

of it early. This chapter is that calendar — season by season, Texas-specific, in the order the year actually happens.

Spring: The Recovery Walk (March–April)

Spring is the most important inspection of the year. Winter's freeze cycles have done their work, spring storms are coming, and everything you find now is cheaper to fix than it will be in August.

- **Walk every wall.**

The full Chapter 2 routine: openings, corners, mortar, lintel lines.

Photograph anything new.

Compare against
last fall's photos if
you have them. -

**Check every
crack you**

marked. Has
anything grown
over winter?

Freeze cycles
move walls — a
crack that was
stable in October
and grew by
February is telling
you something. -

Clear the weep

holes. Wire or
bottle brush, hole
by hole. Check that
mulch and soil are
still four inches
below them —
beds creep up over

winter. - **Inspect
the grading.**

Winter rains
reshape soil. Look
for new low spots
against the
foundation, new
pooling, eroded

areas. Six inches
of fall in ten feet
— re-establish it
where it's
flattened. -

Gutters and downspouts.

Clean them before
storm season.

Check that
downspouts still
discharge away
from the house
and that
extensions

survived the
winter. - **Caulk**

check. Walk every
window and door.

Failed caulk —
cracked,
separated, missing
— gets cut out and
replaced now,

before the driving
rains. - **Sprinkler**

audit. Run every
zone and watch.

Redirect anything
hitting the brick.

Fix heads spraying

the slab edge.
Spring is when
you set the
watering pattern
for the whole year
— set it right. -

Chimney glance.

Binoculars from
the driveway:
crown condition,
top-course brick,
flashing, cap
present? Note
anything for the
fall work list.

Summer: The
Heat Watch (June–
August)

Summer in Texas
is brutal on
masonry — not
from rain but
from heat, sun,
and the occasional
violent storm. The
work this season is
mostly watching
and watering
wisely.

- After every major storm, do a ten-minute walk.

Look for new cracks, displaced brick, gutter damage, and water paths — stains that weren't there yesterday.

Storm damage caught in week one is a repair; caught in year one is a project. -

Watch the mortar in extreme heat.

If you're having any masonry work done, make sure the crew works mornings and protects fresh mortar from baking (Chapter 4). Don't schedule repointing for the hottest week of August if you can avoid it. -

Sprinkler

discipline. Deep, infrequent watering keeps the soil moisture consistent — which matters for the foundation (Chapter 12) as much as the walls. Daily light sprinkling that soaks the wall face is the enemy. Water the soil, not the brick. -

Vegetation

control. Summer growth pushes vines, shrubs, and tree limbs against the wall. Keep eighteen inches of clearance — vegetation holds moisture against the brick, roots invade weeps and joints, and limbs abrade the mortar in wind. - **Check**

the attic. Summer
is a fine time for a
quick attic look:
daylight around
the chimney
penetration, damp
insulation, stained
decking. Heat
makes smells
stronger — if
something's been
quietly wet,
summer often
announces it.

Fall: The Pre-
Winter Prep
(October–
November)

Fall is the second
big inspection, and
it's about getting
the house
buttoned up
before winter's
freeze cycles and
rains.

- **Walk every wall
again.** Same
routine as spring.
Mark and

photograph.
Compare to spring
— anything that
changed over
summer needs
attention before
winter. - **Chimney
service.** This is
chimney season:
inspection,
sweeping if you
burn wood, crown
check, cap check,
flashing check. Get
it done before the
first freeze, not
after. - **Repoint
what's failing.**
Fall's mild
temperatures are
ideal for mortar
work — not too
hot to cure wrong,
not freezing. If
spring's walk
found deteriorated
joints, fall is the
time to fix them. -
Gutters again.
Falling leaves clog
everything. Clean

gutters and
downspouts after
the leaves drop —
clogged gutters in
a winter storm
dump water
exactly where you
don't want it. -

Caulk touch-ups.

Anything that
failed over
summer gets
renewed now.

Winter rain finds
every gap. - **Grade
and drainage
final check.** Make

sure water has a
clear path away
from the house
before the wet
season. Clear
debris from
drainage swales
and area drains. -

Sealer decision. If
you're considering
a breathable water
repellent (Chapter
5), fall application
on a dry wall —

after all repairs
are done — gives
it the best cure
before winter.

Winter: The
Quiet Watch
(December–
February)

Winter is mostly
observation — but
it's the season
when the wall tells
you the most, if
you're listening.

- **Watch for freeze
damage.** After
hard freezes, look
for new spalling —
brick faces that
popped over
winter. Note
where: patterns
tell you which
walls stay
saturated (Chapter
8). - **Check for ice
dams and gutter
overflow.** Texas
ice storms are
infrequent but

revealing — watch
where water goes
when everything's
frozen and
melting. - **Interior
watch.** Winter is
when interior
water signs show
up: musty smells
when the house is
closed up,
condensation on
windows (check
that it's
condensation, not
a leak), stains
appearing on
ceilings near the
chimney or
exterior walls. -
**Don't do masonry
work in freezing
weather.** Mortar
can't cure
properly below
about 40°F — it
freezes before it
hydrates, and the
result is weak,
crumbly joints.
Any contractor

willing to lay brick
or repoint in a
hard freeze is a
contractor to
avoid. Wait for the
thaw. - **Plan**

spring's projects.

Winter evenings
are for the
planning this book
enables: which
walls need
repointing,
whether that lintel
line needs a
professional look,
what the budget
looks like. Come
March, you're
ready.

The Standing Habits

Beyond the
seasons, a few
habits that cost
nothing:

**photograph your
walls once a year**

from the same
spots — a visual

record beats
memory every
time. **Keep a
simple log** — a
notes app entry
per season: date,
what you checked,
what you found.

**Know your
house's age and
era** — the mortar,
ties, and flashing
details of a 1965
home differ from a
2005 home, and
every contractor
you ever hire will
ask. And **never
ignore a change**
— a new crack, a
new stain, a new
smell. The wall
talks constantly.
The calendar just
makes sure you're
listening.

An hour in spring,
ten minutes after
storms, an hour in
fall, and quiet

attention in
winter. That's the
whole program.
It's the cheapest
insurance your
brick house will
ever have. ##

Chapter 11: Veneer Repairs Done Right

Sooner or later,
every brick veneer
home needs a
repair — a section
of spalled brick, a
run of failed
mortar, a lintel
replacement, a
chimney rebuild.
This chapter is
about what “done
right” actually
looks like, step by
step, so you can
recognize it when
you see it — and
recognize its
absence before
you pay for it.

**It starts before
anyone touches
the wall:**

protection. A
proper crew
protects what isn't
being repaired.

Windows get
covered.

Landscaping gets
shielded. Concrete
and walkways get
covered against
mortar droppings
and staining. The

work area gets
contained. If a
crew shows up
and starts
swinging
hammers with
your rose bushes
exposed and your
windows
uncovered, you're
watching the first
five minutes of a
cleanup you'll be
doing yourself.

**Removal is
surgical, not
demolition.**

Taking brick out of
a veneer wall is
careful work. The
mason removes
only what needs to
come out —
cutting mortar
joints with a
grinder or chisel,
working brick by
brick, preserving
every unit that can
be reused.

Indiscriminate
smashing damages
the surrounding
brick, cracks
adjacent joints,
and turns a
contained repair
into a bigger one.

Watch how a crew
removes brick:
patience here
predicts quality
everywhere else.

What's behind the wall gets inspected. This is the step the cheap crews skip, and it's the most important one. With the brick open, a good mason looks at everything the wall was hiding: the condition of the ties (are they intact? rusted? missing?), the sheathing and framing (any rot? any water staining?), the flashing (present? intact? properly lapped?), the cavity (bridged with mortar droppings?). A repair that closes the wall back up without looking behind it is a

repair built on
assumptions.
Sometimes what's
behind is fine.
Sometimes it's the
actual problem —
rotted sheathing
from years of
flashing failure —
and covering it
back up is
malpractice with
mortar.

**Ties get replaced
or supplemented
where needed.** If

the wall is open
and the ties are
corroded or
missing, this is the
time — the only
economical time
— to fix them.

New ties get
properly fastened
to the framing and
embedded in the
fresh mortar
joints. This is also
when wall

anchors or
remedial tie
systems go in on
walls that are
bulging or leaning.
A repair that
ignores failed ties
is cosmetic.

Flashing goes in correctly. Every
repair that opens a
wall is an
opportunity to
install or repair
flashing — and a
proper repair
takes it. That
means a
waterproof
membrane at the
base of the repair
area, lapped and
directed to weeps;
flashing over any
lintel in the repair
zone; and proper
integration with
the existing
flashing above and
below. Flashing

details are fussy,
invisible when
done, and the
difference
between a repair
that lasts and one
that fails from the
inside. Ask your
contractor to
photograph the
flashing before the
brick goes back. A
pro won't mind —
he'll probably
offer.

**The brick goes
back with
matched units.**

Brick matching is
the visible half of
the craft. On older
homes, the
original brick may
be long out of
production. A
good mason has
sources — salvage
yards, brick
dealers with old
stock,

manufacturers
who still run
similar lines —
and the patience
to find a close
match in color,
size, and texture.
Perfect matches
on fifty-year-old
brick are rare;
close matches, laid
with skill,
disappear into the
wall. What you
don't want: a
glaringly different
brick that
announces the
repair from the
street. Ask to see
the replacement
brick before it's
laid. Compare it
yourself, in
daylight, against
the wall.

**Mortar: depth,
mix, and color.**

The joints get
raked or cut to

proper depth —
remember, at least
twice the joint
width. The mix
matches the
original's strength
(Chapter 4's rule:
no harder than the
brick). The color
gets matched
through the real
process: test
batches, cured
samples, daylight
comparison. The
joints get tooled to
match the existing
profile — concave,
flush, raked,
whatever the wall
has. Joint profile is
one of those
details
homeowners
never notice
consciously but
always feel: a wall
with two different
joint profiles looks

“off” even if the color matches.

Cleanup is part of the job, not an afterthought.

Mortar smears get cleaned while they’re fresh — dried mortar on brick faces is a miserable thing to remove and often damages the brick in the removal.

Windows get uncovered and checked. Beds get raked. Debris gets hauled. The crew’s last hour should be cleanup, and the contract should say so.

Walk the finished job with the contractor before final payment: look at the repair from the curb, from ten feet, and

up close. Check the windows, the concrete, the landscaping. A repair isn't done when the mortar is tooled. It's done when your property looks like the crew was never there — except for the wall, which should look like it was never broken.

Curing gets respected. Fresh mortar needs time and moisture to reach strength. In Texas heat, that means the crew should be protecting new work — misting, covering, working in appropriate hours. Nobody should be blasting your fresh

repointing with a
sprinkler or letting
it bake uncovered
at 105°F. Ask what
the curing plan is.
The answer tells
you whether
you're dealing
with a craftsman
or a labor broker.

Let me give you
the composite
hypothetical —
two versions of the
same job. A
section of wall
above a side
window needs
rebuilding after a
lintel replacement:
about forty square
feet of brick.

Done right: the
crew protects the
window and beds,
removes the brick
surgically, and
finds two rusted
ties and a mortar-
bridged cavity.

They clean the
cavity, replace the
ties, install new
flashing over the
new lintel with
weepers, source
matching brick,
match the mortar
through test
batches, lay the
brick with proper
joints, tool to
match, clean as
they go, protect
the curing mortar,
and leave the site
spotless. From the
curb, you can't
find the repair.
Twenty years later,
you still can't.

Done cheap: the
crew knocks the
brick out with no
protection, never
looks behind the
wall, reuses the
rusted ties (or
ignores them),
skips the flashing

(“the old one
looked fine” — it
wasn’t there), lays
the closest brick
the yard had,
smears in a stock
mortar mix that’s
two shades off and
harder than the
original, leaves
mortar smears on
the window, and
disappears. It
looks okay from
the driveway on
day one. By year
five the color
mismatch has
weathered worse,
the hard mortar is
popping brick
faces, and water is
working behind
the unflashed
repair. The
homeowner pays
twice.

The difference
between those two
jobs isn’t luck. It’s

process — and
now you know
what the process
looks like. When
you hire the
repair, you're not
just buying the
finished wall.
You're buying
every invisible
step. Make sure
you're getting
them. ## Chapter
12: Your House Is a
System

We've spent
eleven chapters on
brick — the skin,
the mortar, the
lintels, the water,
the chimney, the
maintenance. Now
it's time to zoom
out, because the
most important
lesson about your
brick wall is that
it's not really
about the brick at
all. Your house is a

system. The brick is one part. The foundation, the soil, the drainage, the gutters, the grading, the roof — they're all one connected machine, and every part affects every other part. Homeowners who understand the system make good decisions.

Homeowners who treat each part in isolation get sold the wrong fixes.

Start at the bottom: **the soil.**

North Texas sits on expansive clay — soil that swells when wet and shrinks when dry, moving with enough force to lift houses. Your foundation's entire

job is to ride that
movement
without
transmitting it to
the house. When
the soil moves
unevenly — one
corner wet, one
corner dry — the
foundation moves
unevenly, and the
brick skin above it
cracks in the stair-
steps we learned
to read in Chapter
2. Half the “brick
problems” I’ve
been called to look
at were soil-
moisture problems
wearing a brick
disguise.

That makes
drainage the
master control.
Everything about
water
management in
this book —
gutters,

downspouts,
grading, weeps,
flashing — serves
two masters at
once: keeping
water out of the
wall *and* keeping
soil moisture even
around the
foundation. A
downspout
dumping at the
corner doesn't just
threaten the brick
with splash-back;
it saturates the soil
at the corner,
swelling the clay,
heaving the
foundation, and
cracking the wall
above. One fix —
extending the
downspout —
solves both. The
system rewards
you for thinking in
connections.

The foundation
carries everything.

When a
foundation settles
or heaves
differentially, the
brick veneer —
rigid, brittle,
unforgiving — is
the first thing to
show it. That's
why reading
cracks (Chapter 2)
and
understanding the
order of diagnosis
matters: engineer
first, then
contractor. And
when foundation
repair is genuinely
needed, the
method matters
enormously. In
Texas clay, the
proven approach
is **pressed**
concrete piles —
cylindrical
concrete segments
pressed
hydraulically into
the ground, one

after another, until
they reach refusal:
the point where
the ground itself
proves it can carry
the load. No
guesswork about
depth. The pile
goes until the
earth says stop.
That's the
standard I trust,
through my
foundation
company, Metro
Foundation Repair
— pressed
concrete piles to
refusal, because a
foundation repair
is only as
permanent as the
ground it's
standing on.

Notice how the
system thinking
changes the
humble **gutter**. A
gutter isn't a
gutter — it's the

first stage of
foundation
protection and
wall protection
simultaneously. It
catches a
thousand square
feet of roof water
and decides where
it goes. Point it at
the foundation
and you've created
a soil problem and
a wall problem.
Point it away and
you've solved
both. The
cheapest, highest-
leverage
component on the
whole house is a
ten-dollar
downspout
extension. The
system view
makes that
obvious. The
isolated view
misses it entirely.

The roof connects too. Roof water has to go somewhere — gutters, then downspouts, then grade. Roof flashing meets wall flashing at every intersection, and the chimney flashing (Chapter 6) is the most failure-prone joint on the house. A new roof installed without proper chimney counter-flashing is a system failure waiting for the first hard rain. When you hire a roofer, ask about the chimney flashing integration specifically. When you hire a mason for chimney work,

ask about the roof integration. The trades meet at the joints — make sure someone owns the joints.

Grading is the landscape half of drainage. The soil around your house should fall away in every direction — that six-in-ten-feet rule from Chapter 7. But grading also interacts with the foundation's moisture needs: in Texas clay, you don't want the soil bone-dry either. Consistent moisture is the goal — not wet, not dry, *consistent*. That's why foundation watering programs exist in

drought summers:
soaker hoses run
at intervals to
keep the clay from
shrinking away
from the
foundation. It's the
same principle as
the wall: extremes
damage,
consistency
protects.

Trees are the wild
card in the system.

A large tree near
the house drinks
hundreds of
gallons a day in
summer, drying
the soil on its side
and causing
differential
settlement — the
foundation drops
toward the tree,
the brick cracks on
that elevation. The
answer usually
isn't removing the
tree; it's managing

moisture with root
barriers or
supplemental
watering. But the
system view
means you never
look at a crack on
the tree side of the
house without
thinking about the
tree.

Here's how system
thinking changes a
real decision — a
composite
hypothetical. A
homeowner sees
stair-step cracking
on the east wall,
worst near the
corner. The
isolated view says:
brick problem, call
a mason. The
system view asks:
what's on the east
side? There's a
downspout
discharging at that
corner, the bed

slopes toward the
house, and a large
oak stands twenty
feet away. The
mason's honest
answer: the brick
is reporting
differential
movement; before
I repoint anything,
let's get the
drainage fixed and
have the
foundation
evaluated. The
drainage gets fixed
for a few hundred
dollars. The
foundation turns
out to need
pressed concrete
piles at that corner
— a real repair,
done once, to
refusal. *Then* the
mason repoints
the crack. Total
cost: significant
but final. The
isolated view
would have

produced a
repointed crack
that reopened
within two years
— because the
cause was never
the mortar.

That's the system.
Soil moves
foundation.
Foundation moves
brick. Water
drives soil.
Gutters, grading,
and drainage
control water. Roof
meets wall at
flashing. Trees
drink. Everything
connects.

Long-term
thinking is the
payoff. A house is
a thirty-, fifty-,
hundred-year
asset. Every
decision in this
book compounds:
the weep you clear
this spring

prevents the sill
rot of 2031. The
flashing installed
correctly today
outlives the
mortgage. The
foundation
repaired to refusal
settles the
question
permanently
instead of renting
the answer. The
cheap fix,
repeated three
times, always costs
more than the
right fix done
once. The system
rewards patience
and punishes
shortcuts — on a
timeline longer
than any single
contractor's
warranty.

You now know
more about your
brick house than
most of the people

who will ever bid
on working on it.
You know what
the wall is doing,
how to read it,
where water gets
in, what good
work looks like,
and how it all
connects. That's
not just
homeowner
knowledge —
that's power. Use it
every spring and
fall, use it every
time someone
gives you an
estimate, and use
it to keep the
system balanced
for as long as you
own the house.

The wall will keep
talking. You speak
the language now.

Conclusion

If you've read this
far, you know
something most

homeowners
never learn: your
brick wall is a
system, it talks to
you constantly,
and almost
everything it says
is about water.

You know the
brick is a skin, not
the structure —
held on by ties,
vented by a cavity,
drained by weeps.
You can read stair-
step, vertical, and
horizontal cracks
and know which
ones to watch,
which ones to
mark, and which
ones earn a call to
an engineer. You
know the steel
lintel above every
opening is rust-
jacking its way
toward failure on
thousands of
Texas homes, and

you know what a
proper
replacement
demands. You
know mortar has
to match in
strength and color,
that repointing
has a real depth,
and that the
cheapest bid is the
most expensive
job. You know
where water gets
in — flashing,
weeps, caps,
grading, gutters —
and you know the
twice-a-year walk
that catches it
early. You know
the chimney is the
tallest liability on
the house, the slab
edge deserves
your attention,
and every
symptom — the
white bloom, the
flaking face, the
rust bleed — is a

report you can
now read.

None of this
requires you to
become a
bricklayer. It
requires an hour
in spring, ten
minutes after
storms, an hour in
fall, and the habit
of looking. The
wall does the
talking. You just
have to listen.

And when the wall
says it needs a
professional —
when the crack is
growing, the lintel
is jacking, the
chimney crown is
gone, or the
mortar is failing
faster than you
can watch — you
now know how to
hire one.

Diagnosis before
price. Written

scope. Mortar
craft. Water
management.
Cleanup. A
warranty from a
company that will
still be here. Hold
every contractor
to that standard,
including us.

Fifty years in this
trade has taught
me one thing
above all: the
homeowners who
pay attention
almost never get
surprised, and the
ones who get
surprised almost
never were paying
attention. You're
paying attention
now. Your house is
in good hands —
yours.

One last thing, and
I mean it. Brick
houses are
forgiving. They

give you years of
warning before
anything becomes
serious — the
hairline that sits
quiet for a decade,
the weep that
clogs slowly, the
crown that cracks
a little more each
season. That
forgiveness is a
gift, but only if you
accept it by
looking. The most
expensive
sentence in
homeownership is
“I noticed that a
while ago but
never did
anything about it.”
Don’t let it be
yours. Walk the
walls. Mark the
cracks. Clear the
weeps. Call early,
when the fix is
small and the
options are many.
Your brick house

has stood through
decades of Texas
weather already
— with a little
attention from
you, it'll stand
through decades
more.

Keep this book
where you keep
your home
records. When the
spring walk comes
around, bring it
with you —
Chapter 2 for the
cracks, Chapter 7
for the weeps,
Chapter 10 for the
checklist. Dog-ear
the pages. Write
dates in the
margins. A book
that lives in a
drawer helps no
one; a book with
muddy
fingerprints and
your own notes in
it is a maintenance

program. That's
what this was
always meant to
be — not
something you
read once, but
something you use
twice a year, every
year, for as long as
the brick stands
over your head.

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 something in this book matched what you're seeing on your own walls — a stair-step crack, a rusting lintel line, mortar that's washing out, a chimney you're not sure about — start with the twice-a-year walk in Chapter 10, mark and photograph what you find, and then call someone who diagnoses before they price. In the Dallas–Fort Worth area, that's us: Champion Brick Repair at (817) 900-6324, or visit championbrickrepair.com.

For foundation concerns anywhere in our service area: Metro Foundation Repair — pressed concrete piles, driven to refusal — (817) 523-1540, metrofoundationrepair.com.

For failing lintels: LintelLOCK — the field-developed lintel replacement system — (469) 730-0650, lintlerepair.com.

About the Author

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Travis started in the trades as a young man and never left. Five decades of Texas clay, Texas heat, and Texas brick taught him what no classroom could: how walls really move, where water really goes, and how to fix things

once instead of twice. He writes these books the way he talks on a job site — plain, direct, and on the homeowner's side. He still hates watching people get ripped off more than just about anything.