

STONEBRIAR HOMEOWNER GUIDE

Home Maintenance Handbook

Practical care and seasonal readiness for North Texas homeowners



Prepared by Keith Boggs
Owner and Inspector · TREC #9867
Stonebriar Property Inspections since 2007

214-923-7304
keith@spi-guy.com
stonebriarpropertyinspections.com

Purpose, scope, and safe use

A homeowner field guide, not a repair manual, code checklist, or substitute for qualified evaluation.

This handbook helps homeowners notice routine maintenance needs, keep useful records, and respond calmly when a condition changes. It emphasizes visible, accessible observations and the relationship between systems: roof runoff affects site drainage; drainage affects the foundation perimeter; attic and duct conditions affect comfort; and a slow leak can damage finishes, cabinets, framing, and equipment.

Homes, equipment, materials, and local requirements differ. Manufacturer instructions, utility guidance, permit requirements, and the advice of the appropriate licensed trade take priority when they are more specific. Never open energized equipment, enter unsafe attics or crawlspaces, walk a roof, disturb suspect hazardous materials, or attempt work beyond your training.

Stonebriar Property Inspections has served North Texas homeowners since 2007. Owner and inspector Keith Boggs brings more than 20 years of personal home inspection experience. This guide draws on that experience to help you control water, recognize warning signs, and keep useful records. Maintenance cannot prevent every failure or establish the condition of concealed components.

- Use the checklists as prompts, not as proof that a system is safe or code-compliant.
- Photograph changing conditions from the same position and retain repair, permit, warranty, and service records.
- When safety, active damage, repeated failure, or rapid change is present, stop routine monitoring and obtain qualified help.

EMERGENCY. Call emergency services or the responsible utility when there is fire, suspected gas leakage, carbon-monoxide alarm activation, collapse risk, or another immediate threat.

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STONEBRIAR PROPERTY INSPECTIONS

About the author



Keith Boggs is the owner and inspector of Stonebriar Property Inspections, a Texas Real Estate Commission (TREC) Professional Inspector, license #9867, and a Texas Department of Agriculture licensed termite technician. Stonebriar has served Dallas, Collin, Denton, and Tarrant County homeowners since 2007, providing buyer, seller, annual maintenance, one-year builder warranty, termite/WDI (wood-destroying insect), sewer scope, thermal imaging, and Zip Level foundation measurement inspections.

How to use this handbook

Move from observation to action without guessing at a concealed cause.

Start by locating your water shutoff, electrical disconnect, gas meter, alarms, and emergency supplies. The home control map and contact worksheet help another household member find them without calling you.

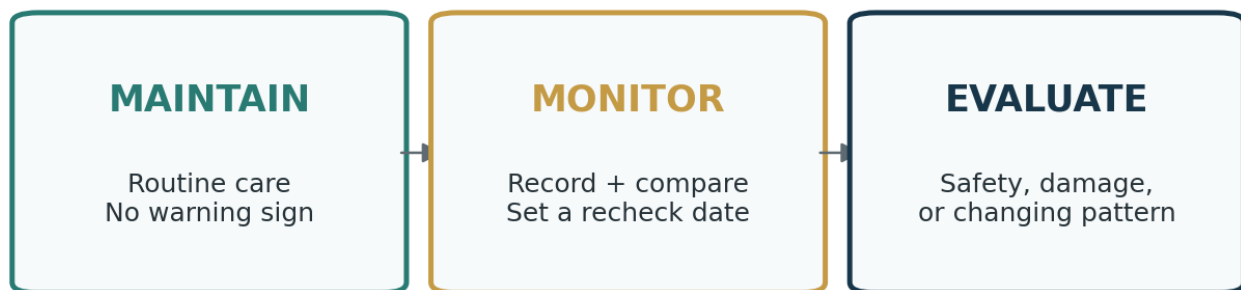
Use system chapters for questions, seasonal checklists for planning, and records for follow-up. Note the date, location, weather, change, and photo reference. Follow equipment manuals and assign a specific recheck date.

SAFE PRACTICE. Pause when access or a task is uncertain. Ask the appropriate professional before operating an unfamiliar control.

Choose the right response

Use the condition and its consequences to decide what happens next.

Routine maintenance is safe, expected upkeep. Monitor a non-urgent change with a dated photograph and a recheck date. Professional evaluation is for uncertain causes, recurring faults, or specialized work. Urgent service means stop using the affected system or restrict access and arrange prompt help. An emergency means leave danger and contact 911 or the responsible utility from safety.



Escalate when the condition becomes urgent, spreads, repeats, or changes quickly.

Response	What to do next
Routine maintenance	Complete safe scheduled care; record the result.
Monitor	Record a baseline, a responsible person, and a recheck date.
Professional evaluation	Arrange the appropriate licensed or specialized trade.
Urgent service	Stop affected use or restrict access; obtain prompt service.
Emergency	Leave danger; call 911 or the utility from safety.

The first 30 minutes

Gather controls, contacts, and records before a problem makes them urgent.

- 1 Locate and label the homeowner water shutoff, electrical disconnect, gas meter, alarms, and main equipment. Do not remove covers or test unfamiliar controls.
- 2 Photograph the controls and add their locations to the home profile.
- 3 Print utility emergency numbers, insurer information, and trade contacts.
- 4 Note special instructions for pools, irrigation, tankless heaters, solar, generators, or batteries.
- 5 Show the household where the records are kept and keep access clear.

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Find the right page

Start with the symptom, then use the system chapter.

An emergency takes priority over a checklist. Leave danger, call for help, and use the emergency pages only when safe. The index uses everyday terms as well as equipment names.

A schedule is a reminder, not a guarantee. Follow the actual equipment manual, installation conditions, water quality, weather, and service provider advice. Record “not applicable” for absent systems and “not checked” when access is unsafe.

If you notice	Start here
Water flowing or a wet ceiling	Active leak 10; hidden water 26; shutoffs 46
Gas odor or a CO alarm	Alarm response 12; gas 13; CO 60
A warm outlet or repeated trips	Electrical emergency 11; GFCI 57; AFCI 58
Hail, wind, or storm damage	Severe storm 13; roof 31; insurance claims 101
A crack or sticking door	Foundation evidence 25; movement log 26
Water below an HVAC unit	Condensate 68; humidity 70
An unreliable garage door	Door safety 74
You need a routine	Monthly 82; calendar 83; annual 88
You have a new home or a warranty question	Warranty types 98; timeline 98
You need to record a repair	Logs 109; closeout 114
You want a printable plan	Seasonal checklists 93
You need a licensed provider	Texas provider directory 89

North Texas by the numbers

Why a Dallas–Fort Worth home needs a maintenance plan built for this climate and these soils.

Most national maintenance checklists assume a moderate climate and stable soil. North Texas offers neither. A typical year at Dallas/Fort Worth International Airport brings about 37 inches of rain, most of it in heavy spring and fall storms; roughly three weeks at or above 100°F; and about a month of nights at or below freezing. Underneath many Collin and Dallas County homes sits clay that swells when wet and shrinks when dry. Hail arrives most years, usually between March and June.

These conditions explain the emphasis throughout this handbook: control water, keep soil moisture consistent, prepare for freezes, and document what changes after storms. The figures below come from federal data sources and are summarized for planning, not for predicting conditions at any one address.

37.01 in.

average annual
precipitation at DFW Airport
(1991–2020 normal)

20.3

days per year at or above
100°F (1991–2020 normal)

29.2

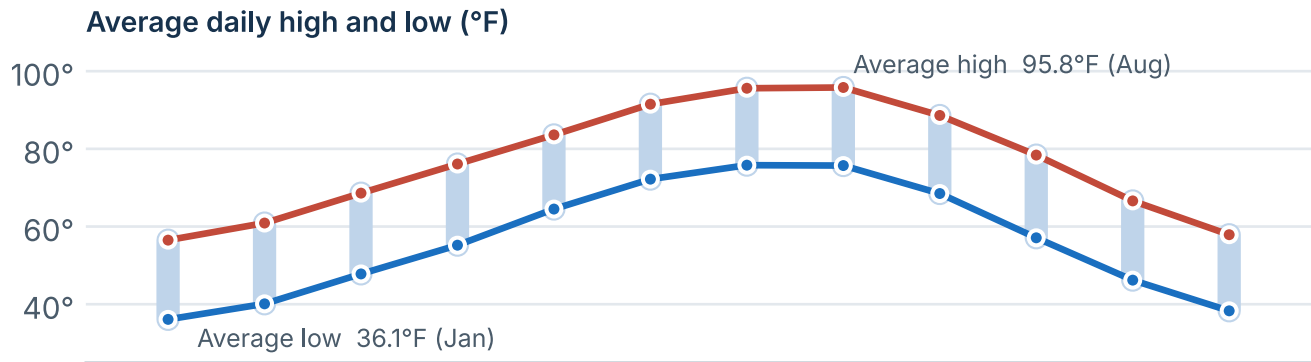
nights per year at or below
32°F (1991–2020 normal)

≈9

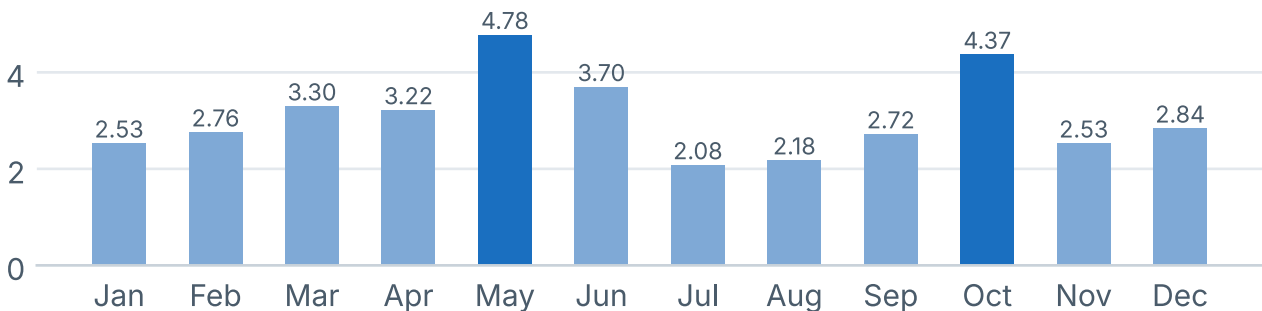
days per year with 1-inch-
or-larger hail reported in
Collin, Dallas, or Denton
County (2005–2024)

Sources: NOAA NCEI U.S. Climate Normals 1991–2020, DFW Airport station USW00003927; hail days are a Stonebriar analysis of the NOAA Storm Prediction Center severe-hail database, 2005–2024. Hail counts depend on how many people report storms and are not a probability for a particular property.

DFW Airport monthly climate normals, 1991–2020



Average precipitation (inches) · 37.01 in. per year



Source: NOAA National Centers for Environmental Information (NCEI), U.S. Climate Normals 1991–2020, station USW00003927. May (4.78 in.) and October (4.37 in.) are the wettest months.

What the numbers mean for maintenance

Each local condition points to a specific homeowner habit.

Local condition	What it means at home	Where to read more
Spring and fall downpours	Gutters, downspout discharge, and grading are tested hardest in May and October. Observe runoff during real rain.	Read the site after rain (page 20)
Expansive clay soil	Wet and dry swings move soil unevenly. Correct drainage first; keep perimeter moisture reasonably consistent.	Foundation moisture plan (page 23)
Hail and high wind, March–June	Photograph the roof and exterior from the ground each spring so storm changes are easy to document.	Severe storm, hail, and high wind (page 13)
Long stretches of 100°F heat	Air conditioners run near capacity, condensate drains work hardest, and soil dries quickly beside the slab.	Summer heat and soil moisture (page 86)
Hard freezes, even if brief	Exposed plumbing, irrigation backflow assemblies, and tankless heaters need a written freeze plan.	Freeze and pipe-burst response (page 15)



01

Emergency readiness

Emergencies reward preparation. This chapter covers the controls to locate now and the first actions to take during leaks, electrical hazards, alarms, gas odors, storms, and freezes.

Your home control map	10	Suspected gas leak	13
Active water leak	10	Severe storm, hail, and high wind	13
Electrical fire, arcing, or burning odor	11	Freeze and pipe-burst response	15
Smoke and carbon-monoxide alarm response	12	After the event: document and close the loop	17

Your home control map

Know where to act before you need to act quickly.

Create one marked floor-plan or simple hand sketch showing the controls and access points below. The map should help another household member find a location without calling you. Add a current exterior photograph when the feature is outside or visually concealed by landscaping.

System	Mark and photograph
Main water	Homeowner valve, meter box, special tool location
Electrical	Main panel, exterior disconnect, generator/solar/battery shutoffs
Gas	Meter location and utility emergency number
HVAC	Indoor units, outdoor units, condensate terminations
Fire safety	Alarms, extinguishers, escape routes, meeting place
Drainage	Cleanouts, area drains, sump equipment if present
Special systems	Pool, irrigation, well, septic, lift station, fire sprinklers

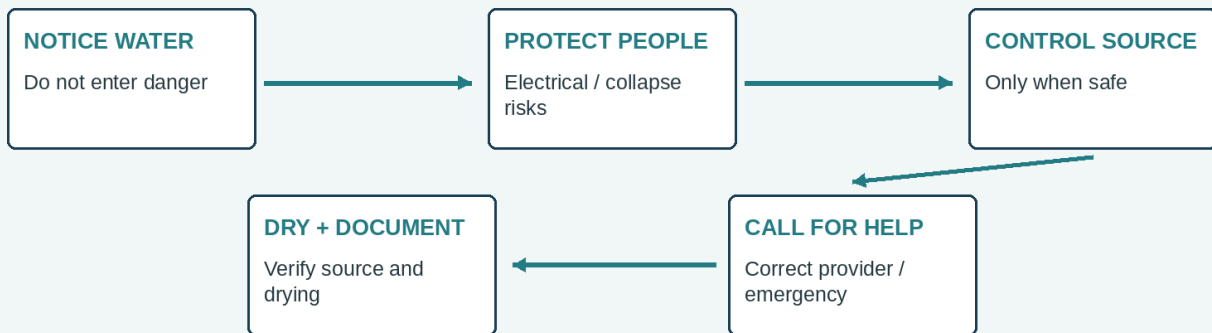
SAFE PRACTICE. Do not operate an unfamiliar gas valve or remove an electrical cover simply to complete the map.

Ask each provider to explain controls that are uncertain. Check that another household member can find the labeled controls at night without entering a hazardous area.

Active water leak

Protect people first, then limit the source when it can be done safely.

Water can travel far from the visible drip. A ceiling stain may originate at a roof transition, plumbing line, appliance, condensate system, or an upper-level fixture. The first goal is not to diagnose the concealed path; it is to keep people away from electrical and collapse hazards, isolate the likely source when safe, and begin qualified response.

Active leakage: protect people, control the source, verify recovery

Do not enter standing water near energized equipment. Cleanup alone does not establish that concealed materials are dry.

- Move people and valuables away from sagging ceilings and wet electrical equipment.
- If the source is a fixture or appliance and its labeled valve operates normally, close it. Use the main water shutoff when the source cannot be isolated and shutting down is safe.
- Photograph the source area, affected finishes, meter reading, and any visible flow before cleanup when doing so does not delay safety actions.
- Use towels or containers only as temporary damage control. Wet concealed materials may require professional drying and evaluation.

URGENT SERVICE. Active leakage near electrical equipment, ceiling bulging, sewage, or uncontrolled flow requires prompt professional or emergency response.

Have drying and material-removal decisions based on the water source, duration, and affected assembly. Keep source-repair and drying evidence together; a dry-looking finish can conceal wet insulation or a cabinet base.

Electrical fire, arcing, or burning odor

Do not turn investigation into exposure.

Flickering, buzzing, a hot device, a tripping breaker, smoke, or a burning odor can signal an unsafe electrical condition. Do not repeatedly reset a breaker, touch a hot device, remove a panel cover, or search inside equipment for a cause.

- 1 Move people away from the affected room or equipment.
- 2 Call 911 for fire, smoke, or an immediate threat. Use an extinguisher only when the fire is small, you have a clear exit, and you are trained to use it.
- 3 If power can be shut off without approaching smoke, water, heat, or damaged equipment, use the appropriate labeled disconnect. Otherwise wait for responders.

- 4 Do not restore power until the responsible professional has identified the cause and confirmed the system can be energized.
- 5 Record the circuit, device, time, load in use, breaker behavior, and visible damage.
 - Never use water on energized electrical equipment.
 - Extension cords and power strips are not a permanent wiring solution.
 - A breaker that trips again after reset is reporting a problem, not asking for another reset.

EMERGENCY. For smoke, active arcing, or an immediate electrical threat, stay clear and call 911 from safety. **URGENT SERVICE.** For repeated unexplained trips or damage without immediate danger, stop affected use and contact a licensed electrician. Never approach wet electrical equipment.

A main switch may not isolate solar, generator, or battery circuits. Tell responders which additional power sources are present and let them determine safe isolation and reentry.

Smoke and carbon-monoxide alarm response

Treat an alarm as real until a safe authority confirms otherwise.

Smoke alarms and carbon-monoxide alarms serve different hazards. Household members should know each alarm sound, the escape plan, and the outdoor meeting location. Test and replace alarms according to the manufacturer and applicable local requirements; do not rely on a single remembered interval for every model.

- If a smoke alarm sounds and there may be a fire, leave, close doors behind you when possible, meet outside, and call 911.
- If a carbon-monoxide alarm sounds, move everyone outside to fresh air and call 911 from safety. Stay outside until responders say it is safe to return. Do not re-enter to search for the source.
- Do not silence a recurring alarm and continue sleeping or operating fuel-burning equipment.
- Keep alarm model, installation date, battery type, test history, and replacement guidance in the home record.
- After any event, have the source and affected equipment evaluated before normal use resumes.

EMERGENCY. Headache, dizziness, nausea, confusion, or other possible exposure symptoms require fresh air and medical/emergency guidance; the handbook cannot assess symptoms.

Make the escape plan work for children, visitors, and anyone needing assistance. Learn alarm warning patterns from the manual during a calm period; do not delay evacuation to interpret an unfamiliar warning.

Suspected gas leak

Leave first; make calls from a safe location.

A sulfur-like odor, hissing near gas piping or equipment, unexplained dead vegetation near a buried line, or damaged gas equipment may indicate a fuel-gas concern. Odor intensity is not a reliable measure of danger, and some people may not smell the odorant.

- 1 Do not operate light switches, appliances, garage-door openers, phones, or vehicles inside the affected area.
- 2 Move everyone outside and away from the building.
- 3 From a safe location, call 911 and the gas utility emergency number.
- 4 Do not re-enter or restore equipment until responders or the utility say it is safe.
- 5 Preserve service records and document the equipment involved after the site is released.
 - Do not search for a leak with a flame.
 - Do not attempt an unfamiliar meter shutoff during an active event unless the utility has specifically instructed you and conditions are safe.
 - A pilot problem, soot, unusual flame, damaged vent, or repeated equipment shutdown deserves qualified evaluation even without an alarm.

EMERGENCY. Suspected fuel-gas leakage is an emergency response issue, not a homeowner troubleshooting project.

After the utility releases the site, ask which equipment may be restarted and by whom. Keep its findings with the contractor's repair record.

Severe storm, hail, and high wind

Prepare before the event; inspect from safe locations afterward.

North Texas weather can combine wind, hail, intense rain, lightning, heat, and power interruption. Before the season, clear accessible drainage paths, trim hazardous limbs through qualified providers, secure loose exterior items, identify the safest interior location, and keep flashlights, medication, water, contact information, and insurance records accessible.

- During warnings, follow official local instructions and avoid windows and attached garages when conditions warrant.
- After the event, look from the ground for displaced roof materials, damaged vents, broken glass, loose trim, fallen limbs, fence damage, and new drainage problems.
- Check ceilings, attic-access areas, cabinets, and equipment spaces for new moisture without entering unsafe areas.
- Photograph damage before temporary repairs when safe. Prevent further damage, but do not climb onto a wet or storm-damaged roof.

- Verify contractor identity, insurance, references, applicable registration, scope, and payment terms before authorizing repairs.

EMERGENCY. Stay clear of downed lines, immediate collapse danger, or a tree contacting electrical lines. Call 911 and the responsible utility from safety. **URGENT SERVICE.** Arrange qualified response for storm damage or leakage once the area is safe.

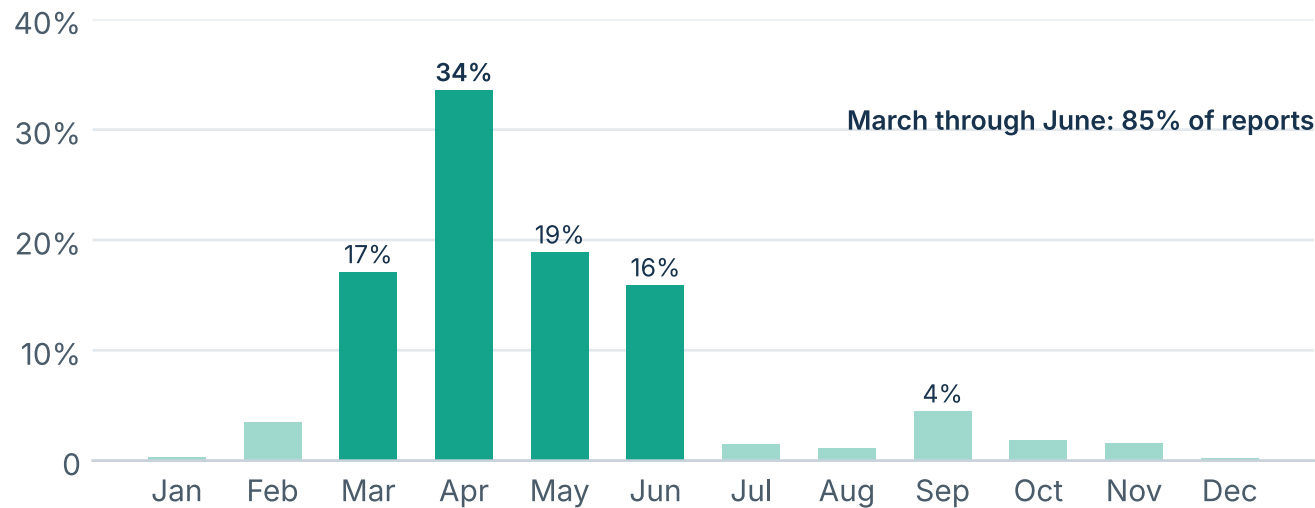
Wind-driven rain can enter transitions that remain dry in ordinary weather. Record the exposed side of the home and when interior symptoms first appeared; arrange safe temporary protection followed by permanent repair.

NORTH TEXAS DATA

North Texas hail: when it arrives and what it costs

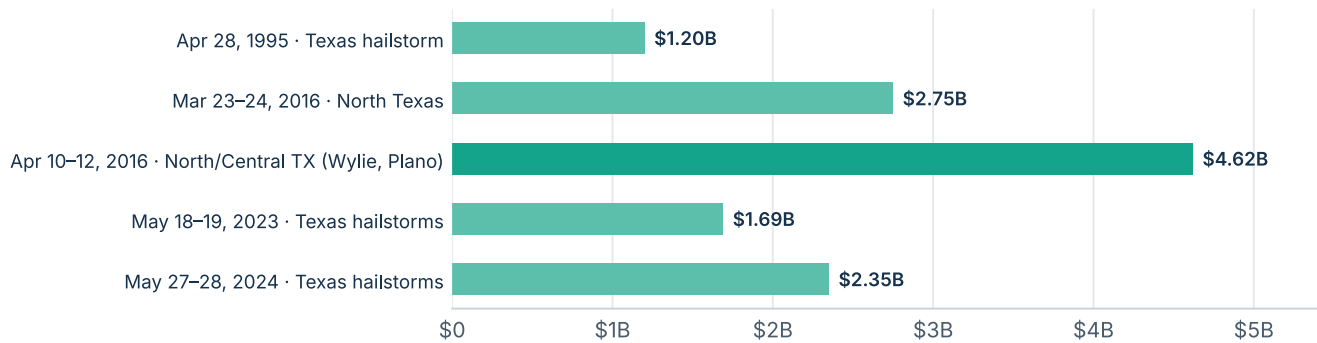
Hail in North Texas is concentrated in spring. Of the 1,006 reports of hail one inch or larger in Collin, Dallas, and Denton Counties from 2005 through 2024, about one-third occurred in April alone, and 85 percent fell between March and June. Stones two inches or larger (about the size of an egg) were reported on roughly two days per year across the three counties.

When hail 1 inch or larger is reported: Collin, Dallas, and Denton Counties, 2005–2024



Source: Stonebriar analysis of the NOAA Storm Prediction Center severe-weather database (1955–2024 hail file), 1,006 reports. Share of reports by month.

NOAA billion-dollar hail disasters affecting Texas (inflation-adjusted cost)



Source: NOAA NCEI Billion-Dollar Weather and Climate Disasters, 1980–2024 event list (CPI-adjusted). The June 13, 2012 Dallas–Collin County hailstorm, with stones up to 4.25 inches, was estimated by the Insurance Council of Texas at \$901 million (NWS Fort Worth).

NORTH TEXAS DATA

Texas leads the nation for hail

According to the Insurance Information Institute, Texas recorded 902 major hail events (hail one inch or larger) in 2025, more than twice the total for second-ranked Kansas. State Farm reported paying \$1.4 billion in Texas hail claims in 2025, the most of any state.

Sources: Insurance Information Institute, “Facts + Statistics: Hail” (NOAA SPC data); State Farm newsroom, April 21, 2026.



Stonebriar field photo: shingle tabs lifted by hand during a roof inspection. Wind and hail damage is often hidden from the ground; a qualified roof evaluation documents it.

Freeze and pipe-burst response

Preparation reduces exposure; thawing can reveal damage later.

Before freezing weather, disconnect hoses, protect vulnerable faucets and exposed piping, keep the home heated, and follow manufacturer instructions for tankless units, pools, irrigation equipment, and other exterior systems. Keep the main water shutoff accessible and confirm the household knows its location.

- 1 If water flow stops during a freeze, do not use an open flame or uncontrolled high heat to thaw piping.
 - 2 Watch cabinets, ceilings, garage walls, exterior faucets, water-heater areas, and the meter as temperatures rise.
 - 3 If leakage appears, protect people from electrical hazards and close the appropriate water supply when safe.
 - 4 Call a qualified plumber for inaccessible, split, or actively leaking piping and for equipment-specific restart guidance.
 - 5 Dry and document affected materials; concealed wet areas may need professional moisture assessment.
- Do not assume the system survived because no leak was visible while it was frozen.
 - Keep receipts and photographs of emergency repairs for insurance and future maintenance records.

URGENT SERVICE. Uncontrolled flow, ceiling sagging, electrical exposure, or failure of a main shutoff requires prompt professional or emergency help.

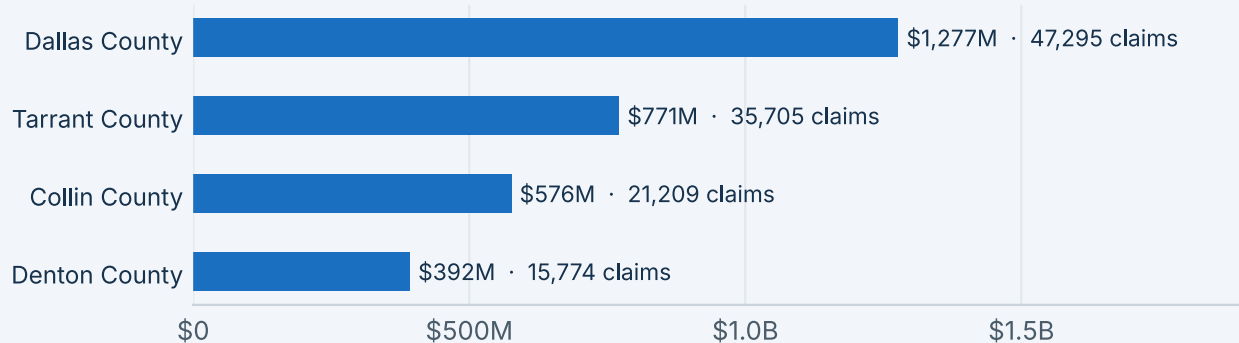
Have a plumber explain any water-shutdown plan in relation to the heater, fire sprinklers, pumps, and other dependent equipment. One dripping faucet does not protect every pipe.

NORTH TEXAS DATA

Lessons from Winter Storm Uri, February 2021

DFW Airport stayed at or below freezing for 139 consecutive hours, from February 13 to 19, 2021, after an earlier 93-hour stretch. The temperature reached -2°F on February 16. Statewide, insurers reported 500,196 claims and about \$10.3 billion in expected insured losses, much of it from frozen pipes and resulting water damage. The average incurred loss for a residential property claim was about \$15,800.

Winter Storm Uri insured losses, selected North Texas counties



Sources: National Weather Service Fort Worth, "February 2021 Winter Event"; Texas Department of Insurance, February 2021 Texas Winter Weather Event data call (data as of July 31, 2021).

The practical lesson is not the size of the storm but its duration. Many homes that handle a single freezing night well were not prepared for nearly six days below freezing combined with power and water interruptions. Write the freeze plan before it is needed.

After the event: document and close the loop

A repair is complete only when the source, damage, and follow-up are addressed.

Do not close a file because a stain was painted, water was removed, or equipment restarted. Confirm that the initiating condition has been corrected, affected materials are appropriately handled, and any temporary repair has a permanent follow-up.

Stage	Evidence to retain
1. Stabilize	Make the site safe and limit further damage.
2. Record	Date, time, weather, alarm, source area, photos, meter readings.
3. Evaluate	Correct trade assesses source and affected systems.
4. Repair	Keep scope, invoices, permits, warranties, and product data.
5. Verify	Confirm operation, dryness, drainage, and no recurring symptom.
6. Recheck	Set a dated follow-up after rain, heavy use, or seasonal change.

PROFESSIONAL EVALUATION. When the cause remains uncertain or symptoms return, escalate instead of repeating cosmetic repairs.

Keep one event file. Label estimates separately from completed work and list inaccessible areas or unresolved questions.

Wind, hail, and water account for most homeowners insurance losses nationally. Good records shorten the claim process and help separate sudden damage from long-term wear, which policies commonly exclude. See [Insurance claims after storms and leaks](#) (page 101).

Homeowners insurance claims by cause of loss, United States, 2019–2023 average

	Claims per 100 insured homes per year	Average claim
Wind & hail	2.80	\$14,747
Water damage & freezing	1.50	\$15,400
Fire & lightning	0.23	\$88,170
Theft	0.12	\$5,524

Source: Insurance Information Institute (Triple-I), “Facts + Statistics: Homeowners and renters insurance,” citing ISO/Verisk data. Frequency is claims per 100 house-years.



02

Water, drainage, and foundation

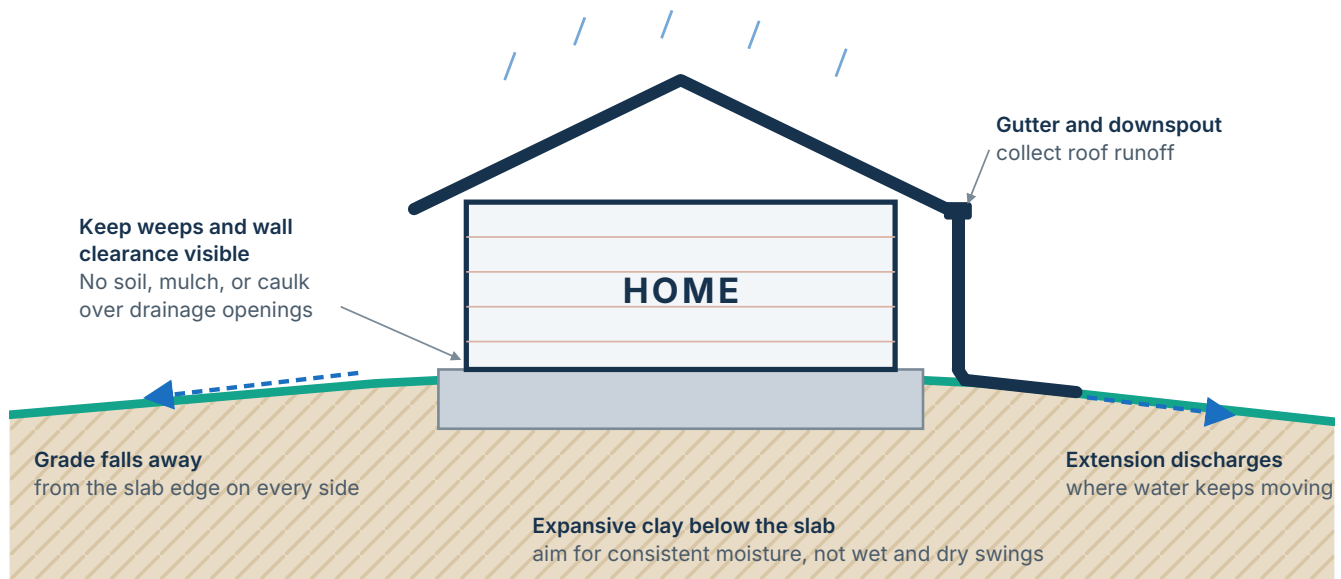
In North Texas, water is the common thread behind many costly repairs. This chapter connects roof runoff, grading, drainage, irrigation, and expansive clay soil to what you see at the foundation.

The North Texas water-management strategy	19	Foundation observations and their limits	25
Read the site after rain	20	A practical movement log	26
Roof runoff and downspout discharge	20	Hidden water: distinguish source from symptom	26
Grading, beds, and clearances	21	After drainage or foundation work	27
Surface drains and buried drainage	22	Water-management annual review	27
Irrigation without hidden damage	22		

The North Texas water-management strategy

Control where water goes, observe how the site responds, and avoid extreme moisture swings.

Expansive clay soils can shrink as they dry and swell as they become wet. Homes and sites respond differently, so there is no single watering formula that applies to every property. The practical goal is to correct obvious drainage defects, avoid chronic saturation, limit concentrated discharge at the slab edge, and document changing patterns rather than diagnosing structural performance from one crack.



- Carry roof runoff to a place where it can continue away without eroding soil or wetting a neighbor's property.
- Maintain visible clearance at wall materials, weep openings, door thresholds, and vents.
- Keep planting beds, edging, and decorative stone from trapping water against the house.
- Adjust irrigation for plant needs and observed site response; do not use it to mask a plumbing leak or known drainage failure.

URGENT SERVICE. Rapid movement, significant floor change, repeated plumbing leakage, or coordinated interior and exterior distress deserves qualified evaluation.

No irrigation routine, drainage product, or maintenance schedule can guarantee foundation performance. Soil type and depth, the structure, trees, leakage, and past repairs all affect the site-specific response.

Read the site after rain

A dry-day walk cannot show how runoff behaves.

Observe during or soon after a representative rain only when conditions are safe. Start uphill and follow the water to its discharge point. Photograph where flow begins, where it concentrates, and where it stops. Note rainfall intensity only from a reliable source; avoid guessing.

Record whether the condition is new, unchanged, improved, or worse after a repair. A photo pair taken from the same angle is more useful than isolated images.

- Ponding beside the foundation or at door and garage thresholds.
- Erosion channels, bare soil, exposed roots, or sediment deposits.
- Gutters overflowing, downspouts backing up, or water spilling behind them.
- Beds that remain wet much longer than surrounding ground.
- Surface drains buried by mulch, holding water, damaged, or not discharging.
- Runoff crossing walks or drives and creating slip, erosion, or icing exposure.
- Sprinkler overspray striking walls, windows, doors, trim, or HVAC equipment.

URGENT SERVICE. Water entering the building, undermining a structure, crossing electrical equipment, or creating unstable soil needs prompt attention.

Compare a brief intense storm with a long gentle rain. Record when ponding begins and how long it remains after rain stops.

Roof runoff and downspout discharge

Do not solve a roof problem by creating a foundation-perimeter problem.

Gutters and downspouts collect large volumes of water. A clean gutter can still perform poorly when it is loose, back-pitched, leaking at seams, undersized for the roof area, or discharging into a trapped bed. Extensions and buried piping must remain intact and must release where water can continue away.

- Inspect from the ground for overflow lines, staining, sagging, open end caps, separated elbows, and missing fasteners.
- Confirm downspouts do not terminate directly at the slab edge or behind edging that traps water.
- Keep discharge clear of walkways and neighboring property; local rules and site conditions matter.
- After cleaning or repair, recheck during rain. A hose test can miss intensity, roof-area, and wind effects.
- For buried lines, note the inlet and visible outlet. Unexplained backup or soil washout may indicate damage or obstruction.

PROFESSIONAL EVALUATION. Roof-edge access, high ladders, steep terrain, damaged gutters, and buried-drain diagnosis belong to qualified providers.

Ask a drainage provider to identify the complete buried route and outlet before approving additional pipe. An extension can be present but crushed, disconnected, or uphill.

Grading, beds, and clearances

Preserve a visible, drainable perimeter instead of hiding it under landscaping.

Soil should support drainage away from the building without covering materials or openings intended to remain exposed. Mulch, raised beds, edging, added patios, and decorative stone can change water paths over time. The correct solution depends on the wall assembly, drainage design, lot slope, and neighboring conditions.

- Do not raise soil to conceal exposed foundation without checking wall clearances.
- Avoid deep cultivation beside unknown utilities or waterproofing.
- Recheck drainage after major landscaping, fence work, patio additions, or pool installation.

Area	Observation focus
Brick veneer	Keep drainage openings visible; do not pack weeps with caulk or mulch.
Wood / composite trim	Maintain separation from soil and chronic splash.
Door thresholds	Keep adjacent surfaces and beds from directing water toward the opening.
Siding / stucco	Preserve system-specific clearances and terminations.
Flatwork	Watch for settlement that directs water toward walls or entries.

PROFESSIONAL EVALUATION. When correction requires retaining walls, excavation, waterproofing, or regrading across property lines, obtain appropriate design and permits.

Do not dig beside a footing or remove supporting soil to create a guessed clearance. Significant grading changes need a coordinated plan.



Stonebriar field photo: deteriorated trim where siding meets soil and chronic splash.



Stonebriar field photo: damaged lower siding and trim at a wall corner. Clearance and drainage help prevent this pattern.

Surface drains and buried drainage

A drain is useful only when water can enter, travel, and discharge.

Area drains, channel drains, catch basins, French drains, and buried downspout lines solve different problems. Some collect surface water; others relieve subsurface moisture. Homeowners should document the intended route and maintain visible inlets and outlets without assuming every buried pipe is clear or connected.

- 1 Locate and photograph each inlet and any visible outlet.
- 2 Remove accessible surface debris without pushing it deeper into the line.
- 3 Observe whether water reaches the inlet and whether the inlet drains after rainfall.
- 4 Look for settlement, sinkholes, erosion, new wet spots, or unexpected discharge along the route.
- 5 After cleaning or repair, verify performance during real rain and record the result.
 - Do not connect or discharge stormwater where prohibited.
 - Do not treat a continuously wet area as a surface-drain problem until plumbing, irrigation, groundwater, and condensate sources have been considered.
 - Preserve access for cleanouts and service.

PROFESSIONAL EVALUATION. Recurring backup, subsurface erosion, unknown outlets, or drainage tied to structural waterproofing deserves qualified evaluation.

Keep installation photographs and a drainage sketch. Do not connect roof runoff to the sanitary sewer or discharge across a neighboring property without an approved design.

Irrigation without hidden damage

Water plants deliberately; do not water walls, equipment, or unknown leaks.

Run irrigation zones periodically while watching from safe locations. A controller can complete its schedule even when heads are broken, valves leak, coverage is uneven, or a zone fails. Seasonal adjustments should respond to weather, plant needs, local restrictions, and site conditions – not a fixed calendar copied from another property.

- Look for geysers, misting, blocked heads, low pressure, runoff, overspray, and heads buried by turf or mulch.
- Keep spray off brick, siding, windows, doors, trim, fences, condensers, meters, and electrical equipment.
- Compare unusually green or wet areas with meter activity and known irrigation schedules.
- Keep valve boxes visible and free of soil; do not force damaged valves.
- Document controller settings before seasonal changes and label zones by location.
- After landscape changes, confirm heads and drip lines still serve the intended plants without wetting the house.

PROFESSIONAL EVALUATION. Broken underground piping, backflow concerns, recurring saturated areas, or electrical faults should be handled by qualified irrigation and trade professionals.

For drip systems beneath mulch, ask how leakage is recognized and how sections can be isolated. Photograph controller settings before service.

A practical foundation moisture plan

Many North Texas homes rest on expansive clay that changes volume as its moisture changes. The homeowner's goal is reasonably consistent conditions around the foundation, while keeping drainage effective. Watering soil is not a structural repair or a guarantee against movement.

Begin with an observation route. During prolonged hot, dry weather, compare accessible soil and landscaping around each side weekly and after meaningful rain. Note sunny and shaded areas, tree influence, separation between soil and the foundation, standing water, broken irrigation, and new door or crack changes. A dry surface or a single probe does not measure moisture beneath the slab.



Stonebriar field photo: measuring along the foundation perimeter. Repeatable measurements from the same reference points make later comparisons meaningful.

If supplemental watering is appropriate, use slow, controlled soaker or drip delivery set back from the wall, with placement suited to the soil and site. Observe the first cycles; stop before puddling, runoff, or chronic saturation develops. Keep water off masonry, trim, vents, and equipment. Do not aim a hose into an open soil gap or soak one corner heavily.

Adjust to the season. Increase observation during heat and drought; reduce or pause supplemental watering after adequate rain and as demand falls. A cool dry period may still need attention, but frozen ground, saturated soil, and local restrictions change the plan. There is no universal number of minutes, days per week, or hose distance for every lot.

Correct leaks, blocked drains, and concentrated roof discharge first. Do not try to cure a wet low spot by adding water elsewhere. Keep mulch below wall clearances and weeps, and coordinate tree removal, new paving, and major landscape work with appropriate professionals.

PROFESSIONAL EVALUATION. Ask a Texas professional engineer when significant or progressive movement requires diagnosis. A qualified irrigation provider can implement an appropriate watering design; neither an irrigation timer nor a foundation contractor's generic schedule replaces a site-specific assessment.

[Texas A&M AgriLife foundation moisture guidance](#)

Local resources: [Frisco watering rules](#); [North Texas Municipal Water District conservation guidance](#). Follow the current requirements of the city and water provider serving your address.



Stonebriar field photo: an irrigation controller. Photograph the program before seasonal changes so a provider can restore it.



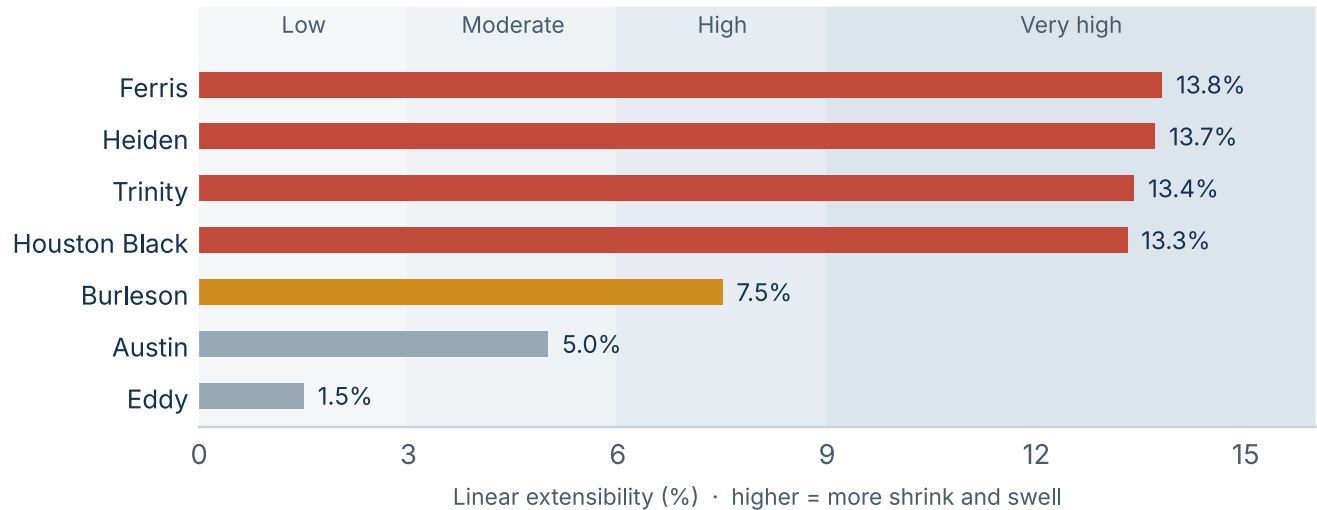
Stonebriar field photo: spray zones should water plants and turf, not walls, windows, or equipment.

NORTH TEXAS DATA

Why North Texas clay moves

Soil scientists describe shrink-swell potential with LEP (linear extensibility percent), the change in length of a soil sample between moist and dry conditions. The USDA Natural Resources Conservation Service rates an LEP of 9 percent or more as “very high.” Houston Black clay, the most common soil mapped in Collin County (about 43 percent of its major soil components), averages above 13 percent. Its official soil-series description notes that, in most years, cracks 0.5 to 4 inches wide extend 12 inches or deeper and remain open for 90 to 150 days.

Shrink-swell potential of major North Texas soils



Source: Stonebriar analysis of USDA NRCS SSURGO data via Soil Data Access (average LEP across mapped layers); class breaks per NRCS (low <3, moderate 3–6, high 6–9, very high ≥9). Houston Black series description, USDA NRCS, revised 2017.

33.5%

of weeks since 2000 with moderate or worse drought over half of Collin County

31.1%

of weeks for Dallas County

33.6%

of weeks for Denton County

Source: Stonebriar analysis of U.S. Drought Monitor county statistics, January 2000 – October 2026 (1,397 weeks). Drought years such as 2006, 2011, 2013–2014, and 2022 are when perimeter soil observation matters most.

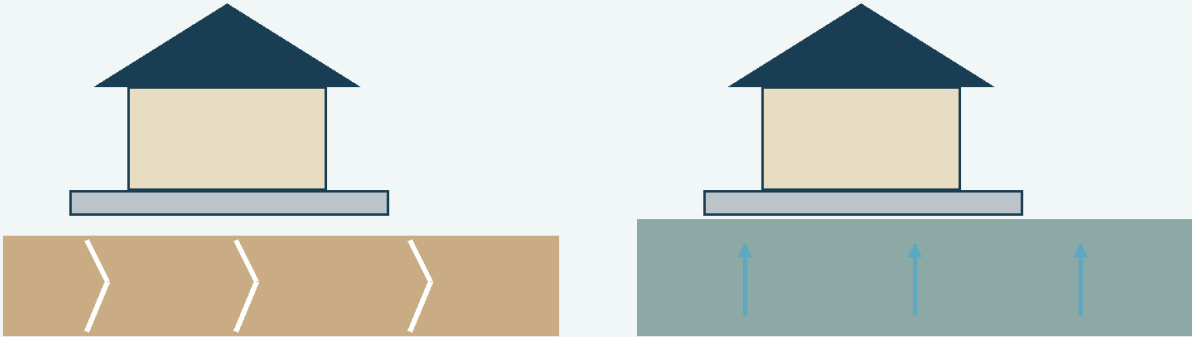
Foundation observations and their limits

Look for patterns, pace of change, and related site conditions.

A single hairline crack does not establish foundation failure, and cosmetic repair does not prove stability. Useful observations connect time, location, weather, plumbing history, drainage, door or window operation, floor changes, and both interior and exterior evidence.

Expansive clay: moisture changes can alter soil volume

Shrink and swell are not uniform across a property.



DRIER SOILWETTER SOIL

Schematic only. Soil, moisture, drainage, trees, and structure interact; this does not diagnose a foundation.

- Use the same camera position and include a fixed reference in repeat photos.
- Do not patch every crack before documenting the baseline.
- Retain elevation surveys, engineer reports, repair plans, warranties, and plumbing tests.

Record	Examples
Common observation	Small stable finish crack, minor caulk separation, seasonal door rub
Higher concern	Widening or recurring crack, coordinated interior/exterior distress, repeated binding
Context	Drought or heavy rain, plumbing repair, landscaping, foundation work
Evidence	Dated photos, simple repeatable measurement, prior surveys, repair documents

URGENT SERVICE. Rapid change, significant displacement, loss of safe operation, or a broad pattern warrants evaluation by an appropriate specialist and/or Texas professional engineer.

Crack width alone does not diagnose structural performance. An engineer may need site history, measurements, and information beyond a visual home inspection.

A practical movement log

Consistency makes the record valuable.

Measurements should be simple and repeatable; false precision can be worse than a clear photograph. Do not represent a phone level, marble test, or isolated homeowner measurement as an engineering floor-elevation survey.

Field	What to capture
Item ID	Assign one number to the same location across all rechecks.
Exact location	Room, wall, opening, exterior elevation, and height from floor if useful.
First observed	Date, recent weather, and known work or leak.
Baseline	Photo filename and simple measurement when safe and repeatable.
Recheck	Date plus Same / Improved / Worse / Unable to compare.
Related clues	Door operation, floor change, drainage, plumbing, exterior pattern.
Action	Response category, responsible person or provider, and next date.

SAFE PRACTICE. If the monitoring method requires risky access, destructive work, or specialized interpretation, use a qualified professional.

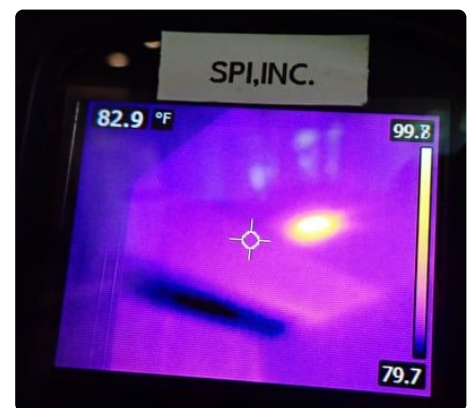
Retain professional surveys in full. Isolated elevation numbers without the method, reference points, and limitations can mislead.

Hidden water: distinguish source from symptom

Wetness at one location can come from several systems.

Staining near an exterior wall might be roof runoff, window leakage, plumbing, condensate, irrigation, or indoor humidity. Damp soil can come from rain, a sprinkler line, a domestic-water leak, a sewer issue, or a normal discharge. Record evidence before choosing a repair.

- 1 Identify when the symptom appears: rain, fixture use, HVAC operation, irrigation cycle, or continuously.
- 2 Compare the water meter during a no-use period when appropriate.
- 3 Check accessible cabinets, appliance connections, HVAC drains, and nearby exterior discharge points.
- 4 Document odor, color, temperature, exact location, and whether the area is expanding.



Stonebriar field photo: an infrared (thermal) image of an interior surface. Thermal imaging shows temperature differences, not water itself; a moisture meter and source investigation confirm the cause.

- 5
- Use the responsible trade to test the suspected system; do not open walls or excavate without a plan.
- Moisture meters and infrared cameras can support an investigation but do not identify a source by themselves.
 - Dry weather does not clear a rain-related leak; low use does not clear an intermittent plumbing leak.

URGENT SERVICE. Sewage, contaminated water, electrical exposure, or wet concealed materials requires qualified response.

Thermal images show temperature patterns, not water itself. Confirm a suspected moisture source before replacing finishes.

After drainage or foundation work

Verify the correction and preserve the evidence.

A completed invoice is not performance verification. Photograph the finished work before landscaping conceals it. Keep design drawings, permits, product data, warranties, engineer letters, elevations, plumbing test results, and the responsible company's contact information.

Foundation stabilization, drainage correction, plumbing repair, and cosmetic restoration may be separate scopes. Closing one contractor's invoice does not prove every related condition has been addressed.

- Recheck roof and site drainage during rain, including discharge points.
- Confirm irrigation coverage did not change in a way that wets the building or repaired area.
- Observe doors, windows, finishes, and known crack locations over the agreed monitoring period.
- Do not immediately conceal access points, cleanouts, outlets, or warranty labels.
- Record any follow-up visit and whether the condition is Same, Improved, Worse, or Not yet testable.

SAFE PRACTICE. If promised performance, drainage, or movement criteria are unclear, obtain them in writing before authorizing work.

Ask what must be maintained after the repair and how success will be checked. Foundation work does not eliminate roof, plumbing, drainage, or future movement concerns.

Water-management annual review

Connect roof, site, plumbing, and movement evidence.

- Choose three priorities for the coming year and assign a date or provider.
- Keep one photo index so repeat locations can be found.
- Separate current observations from old disclosures or prior reports.

Review area	Annual evidence
Roof runoff	Gutters, downspouts, extensions, buried lines, discharge

Review area	Annual evidence
Surface water	Grading, ponding, erosion, beds, drains, thresholds
Irrigation	Leaks, overspray, coverage, controller, saturated areas
Plumbing	Meter check, fixture leaks, appliance lines, sewer history
Foundation clues	Cracks, doors/windows, floors, exterior patterns
Records	Photos, repairs, warranties, engineer/plumber documents

SAFE PRACTICE. A whole-house maintenance inspection can be useful after severe weather, major remodeling, long gaps in review, or before warranty deadlines.

Compare this year’s observations with last year’s. Include removed trees, new paved areas, irrigation changes, and recurring failed repairs when discussing a pattern with a professional.



03

Roof and exterior

The roof, walls, windows, and flashings work as one drainage system. This chapter explains what to observe from the ground and how to document change after storms.

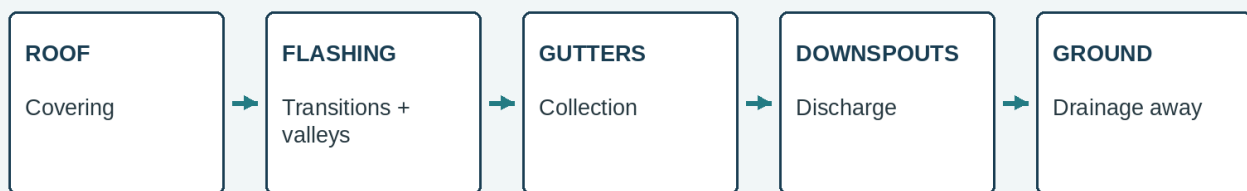
Follow water from roof to ground	30	Sealants and movement joints	34
Ground-level roof observation	31	Windows and exterior doors	35
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Follow water from roof to ground

The roof covering is one link in a drainage chain.

Roof covering, underlayment, flashings, valleys, penetrations, gutters, downspouts, wall transitions, and ground drainage must work together. A roof can have generally serviceable shingles and still leak at one penetration; a sound gutter can still create damage if its downspout empties into a trapped bed.

Roof to ground: every transition is part of the water route



A failure at one transition can send water into the building or toward the foundation.

Use ground-level observations and qualified roof access. Preserve the intended drainage path during repairs.

- Observe after wind, hail, heavy rain, tree work, and contractor access.
- Compare exterior conditions with attic and ceiling evidence.
- Treat sealant as a maintenance material, not a substitute for missing flashing.
- Keep records of roof age, installer, permit, warranty, repairs, and storm claims.

PROFESSIONAL EVALUATION. Walking a roof is outside the homeowner scope of this handbook; use ground views and qualified roof access.

Think of the exterior as connected layers and routes, not independent surfaces. Water should shed from upper components to lower components and away from vulnerable openings. A repair at one transition can affect another. Ask roof and exterior contractors to explain how flashing, underlayment, wall drainage, gutters, and discharge work together.

Ground-level roof observation

Look for change without creating a fall hazard.

Use binoculars or safe ground photographs when they improve visibility. Compare with earlier images from the same elevations. Do not declare hail damage, remaining life, or insurability from photographs alone.

- Missing, displaced, lifted, torn, blistered, or visibly damaged roof materials.
- Loose metal, damaged vents, bent flashings, open wall transitions, or exposed fasteners.
- Debris piles in valleys or behind chimneys and walls.
- Tree limbs touching or overhanging the roof, especially dead or broken limbs.
- Gutter overflow marks, sagging sections, separated joints, and downspout damage.
- New ceiling or wall staining, attic moisture, or daylight at penetrations.
- Granules or fragments at downspouts after a storm, recorded as an observation rather than a coverage decision.

URGENT SERVICE. Active leakage, displaced materials, suspected storm damage, or unsafe tree contact requires qualified evaluation.

Record viewing limits: a roof partly hidden by trees or geometry cannot be declared satisfactory from a ground-level view.

Flashings and penetrations

Most transitions need more than exposed sealant.

Flashings redirect water where the roof meets a wall, chimney, valley, vent, skylight, edge, or change in slope. Their design depends on the roofing and wall materials. Homeowners can look for visible displacement, corrosion, open joints, failed sealant, and staining without lifting materials or dismantling components.

- A fresh bead of caulk does not prove the underlying detail is correct.
- Do not coat over active leakage without source evaluation.
- Keep before-and-after repair photographs.



Stonebriar field photo: roof vents and penetrations are common leak points; note them in your photo route.

Transition	Ground/interior clues
Plumbing vents	Boot cracking, separation, exposed fasteners, staining below
Wall transitions	Loose metal, open counterflashing, sealant-only patches
Chimneys	Cap/crown distress, flashing gaps, masonry staining
Skylights	Cracked glazing, frame gaps, interior staining
Mechanical vents	Loose hood, damaged cap, debris, animal entry

PROFESSIONAL EVALUATION. Repairs that require lifting roofing, rebuilding a transition, or entering steep/high areas belong to a qualified roofer or applicable trade.

Ask the roofer to explain the underlying flashing detail, material compatibility, and future maintenance before accepting a surface patch as a permanent repair.

Gutters, scuppers, and downspouts

Maintain flow without damaging the roof edge or concentrating water at the house.

Check gutters, scuppers, and downspouts in spring and fall and after heavy leaf drop or a major storm. Arrange cleaning at least twice yearly as a starting plan where gutters collect debris; dense trees may require more frequent work. Observe performance during ordinary rain from the ground. Roof access and high-ladder cleaning belong to qualified providers.

- Keep outlets and visible strainers clear; do not work from an unstable ladder.
- Watch for water behind gutters, rotted fascia, peeling paint, soil erosion, and splash staining.
- Confirm downspout elbows remain connected and extensions do not create trip hazards.
- For flat/low-slope roofs, keep scuppers and primary/secondary drainage routes visible and unobstructed.
- Do not permanently block an overflow route; it may be part of the safety design.

PROFESSIONAL EVALUATION. Loose high gutters, damaged fascia, recurring overflow, ponding on low-slope roofs, or unknown concealed drains require qualified evaluation.

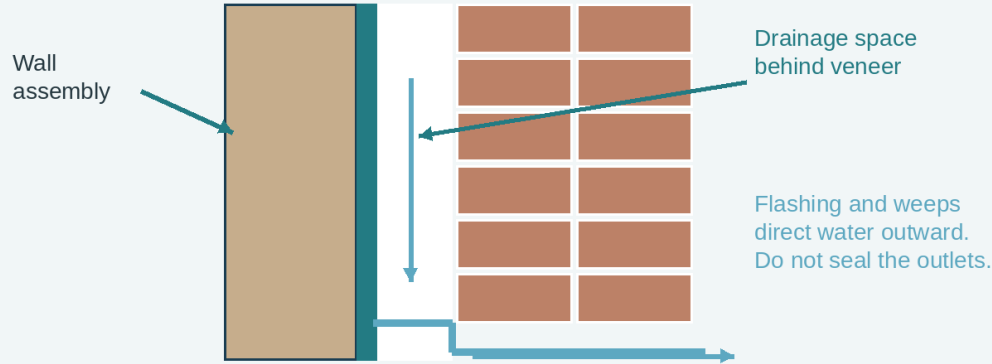
Note the exact overflow location. Water behind a gutter, a joint leak, and overflow at a corner can point to different causes.

Brick veneer and masonry

Masonry sheds water but still needs drainage and movement details.

Brick veneer is not intended to be perfectly watertight. Incidental moisture should drain through the wall assembly and exit at weep openings. Keep intended openings visible and do not pack them with caulk, mulch, stone, or pest-control material that prevents drainage.

Brick veneer: keep the intended drainage route open



Concept only. Materials and details vary. Preserve drainage during landscaping and repairs.

- Look for stair-step cracks, displacement, open mortar joints, spalling, loose units, rust staining, and missing support at openings.
- Note whether cracking relates to windows, doors, roof lines, corners, or foundation observations.
- Keep sprinkler spray and chronic splash off masonry and adjacent trim.
- Do not use a hard surface coating to hide active moisture or movement evidence.
- At repairs, ask how drainage, flashing, and movement joints will be preserved.

URGENT SERVICE. Loose masonry, significant displacement, bulging, rapidly changing cracks, or overhead fall exposure requires prompt specialist evaluation.

Mortar repairs need compatible materials. Repeated cracking warrants a cause assessment before another cosmetic repair.

Siding, stucco, and trim

Different claddings need system-specific repairs.

Fiber-cement, engineered wood, wood, vinyl, metal, traditional stucco, and exterior insulation and finish systems have different joint, flashing, clearance, and fastening requirements. A repair material that works on one can damage or trap moisture in another.

- Look for swelling, soft wood, open seams, broken panels, impact damage, bulging, loose fasteners, and coating failure.
- Observe lower wall edges, corners, roof-to-wall transitions, utility penetrations, and areas behind vegetation.
- Keep soil, mulch, and stored items from holding moisture against wall materials.
- Avoid pressure washing that forces water into joints or damages coatings.

- Match repairs and coatings to the manufacturer and wall system; preserve drainage and ventilation details.

PROFESSIONAL EVALUATION. Widespread soft material, concealed moisture, bulging, recurring cracks, or an unidentified cladding system needs evaluation before patching. Restrict access and obtain urgent help if material is loose or may fall.

Have the provider identify the cladding assembly and damaged substrate before choosing a coating or patch material.

Sealants and movement joints

Seal the joint that is meant to be sealed - and leave drainage openings alone.

Sealant ages from sunlight, temperature movement, moisture, adhesion loss, and incompatible materials. Inspect windows, doors, utility penetrations, trim intersections, fixtures, and wall transitions. The repair should address joint shape, clean surfaces, compatibility, and movement - not simply add another layer.

- Look for cracks, gaps at the sides, hard or brittle material, smearing, and gaps wider than the product can bridge.
- Remove failed material where required rather than covering contamination and loose edges.
- Do not seal masonry weeps, window drainage openings, siding ventilation, or designed expansion joints with rigid filler.
- Use backer material and primer when specified by the sealant system.
- Document color, product, location, preparation, and installation date for future maintenance.

PROFESSIONAL EVALUATION. Persistent leakage, wide moving joints, missing flashing, or uncertainty about the wall system should be evaluated before resealing.

Retain product names, application dates, weather conditions, and warranty instructions so later repairs do not mix incompatible materials.



Stonebriar field photo: an open joint at a window sill and masonry trim.



Stonebriar field photo: an exterior faucet penetration with missing mortar around the opening.

Windows and exterior doors

Operation and water management matter as much as appearance.

Water at a window may come from the window, wall, roof, flashing, or indoor condensation. Record when it occurs before choosing a repair.

- Open, close, latch, and lock units without forcing them.
- Look for cracked glass, loose glazing, failed insulated panes, damaged screens, and worn weatherstripping.
- Check sills, corners, adjacent trim, flooring, and walls for swelling, staining, soft material, or peeling coatings.
- Keep tracks and manufacturer-provided drainage openings clean; do not caulk them shut.
- Maintain thresholds and door sweeps so they limit water and pests without preventing safe operation.
- Compare recurring sticking or separation with seasonal weather, drainage, and other movement observations.



Stonebriar field photo: checking a gap at a window sill. Window leaks may start at the window, the wall, or the flashing; record when water appears before choosing a repair.

URGENT SERVICE. Broken safety glazing, loose units, active leakage, rotten framing, or emergency-exit operation problems require prompt qualified correction.

Condensation between insulated panes differs from moisture on the room-side glass. Have recurring leakage assessed at the complete window-to-wall or door-to-wall transition.

Decks, balconies, steps, and walks

Exterior safety defects can be more immediate than expensive system repairs.

Trip and fall hazards deserve practical priority. A small height change in a regular path can present a more immediate risk than a costly but non-urgent maintenance item elsewhere.

- Look for loose or decayed boards, movement at supports and connections, damaged steps, unstable guards, missing handrails, and protruding fasteners.
- Keep water, soil, vegetation, and stored items from holding moisture against wood and metal.
- Watch for lifted concrete, loose pavers, broken edges, poor lighting, and drainage across walking surfaces.
- Do not conceal critical structural connections behind finishes without documented design.
- Check that exterior doors open onto safe, stable landings and that gates latch as intended.

URGENT SERVICE. Loose guards, unstable stairs, structural movement, overhead hazards, or elevated-deck distress requires prompt qualified evaluation and restricted access.

Do not assume a balcony can support a hot tub, heavy planter, or added storage. Obtain an appropriate structural review before adding loads.

Exterior annual photo route

Repeat the same route to make change visible.

- 1 Front-left corner: capture roof edge, wall, windows, grading, and downspouts.
- 2 Front-right corner: repeat the same wide context.
- 3 Each side elevation: include the full wall and site drainage direction.
- 4 Rear corners: capture patios, decks, doors, roof transitions, and discharge points.
- 5 Close views: known cracks, sealants, repairs, drains, equipment, and tree contact.
- 6 Interior companions: photograph ceilings, attic areas, and finishes below known exterior concerns.
 - Use consistent filenames: YYYY-MM-DD_location_subject.
 - Keep wide context and close detail; one without the other can be hard to interpret.
 - Record the weather and recent work in the photo index.

SAFE PRACTICE. Do not enter a neighbor's property, climb a roof, or use unsafe ladders to complete a photo route.

A photo history shows change; it does not prove that concealed or inaccessible components were inspected.

Exterior repair closeout

Preserve what was repaired, why, and how performance will be checked.

Keep temporary repairs identified as temporary. Ask who owns follow-up after the next rain or storm. If several trades are involved - roofing, masonry, windows, gutters, drainage - record the boundary between their scopes.

Closeout item	Record
Scope	Exact areas and components included/excluded
Cause / condition	Contractor's documented observation; no invented diagnosis
Materials	Manufacturer, product, color, batch/lot when relevant
Access	Photos before closure; concealed condition notes
Approval	Permit, HOA, warranty, insurance coordination as applicable
Verification	Rain check, operation test, photos, follow-up date

SAFE PRACTICE. Do not sign away inspection or warranty rights without understanding the terms; seek qualified advice when the scope or responsibility is disputed.

Ask which contractor owns follow-up when roofing, masonry, windows, gutters, and drainage scopes overlap.



04

Attic and interior

The attic connects the roof, insulation, ducts, wiring, and pests. Interior finishes record what happens above and around them.

The attic from a safe access point	39	Ducts, airflow, and comfort clues	41
Insulation coverage and air pathways	39	Interior finishes as evidence	42
Ventilation without guesswork	40	Pests and concealed damage	42

The attic from a safe access point

The attic often connects roof, moisture, insulation, ducts, wiring, pests, and framing.

Open an attic only when the access, lighting, temperature, and visible walking surface are safe. Many attics lack a continuous floor; ceiling drywall is not a walking surface. Observe from the opening or service platform unless trained and properly equipped.

- Dark staining, active droplets, softened decking, rusted fasteners, or daylight at penetrations.
- Wet, compressed, displaced, or heavily trampled insulation; bare areas above rooms.
- Disconnected, crushed, torn, or poorly supported ducts and visible leakage at joints.
- Bathroom or dryer ducts that terminate in the attic instead of outdoors.
- Rodent evidence, nesting, insect activity, damaged wiring, or chewed materials.
- Cut framing, altered trusses, overloaded storage platforms, or makeshift walkways.



An inspector in an attic beside HVAC equipment and ducts, observing from a service platform.

URGENT SERVICE. Active leakage, unsafe heat, damaged framing, exposed wiring, suspect contamination, or no safe footing means stop and use qualified professionals.

Record an unsafe or concealed attic area as not viewed. A limited observation cannot establish the condition of the whole attic.

Insulation coverage and air pathways

Even, dry insulation performs differently from wet, compressed, or wind-washed material.

Insulation type and required amount depend on the assembly and project. Homeowners can record obvious gaps, compression, disturbance, and moisture without estimating performance from color or depth alone. Air leakage at ceiling penetrations and attic hatches can carry heat and moisture around insulation.

Attic insulation: coverage, air paths, and safe access



Keep intended soffit air paths open.

Do not step on ceiling finishes.

Follow the actual attic design and required clearances. Do not disturb suspect hazardous materials.

- Compare broad areas from a safe viewpoint; note bare spots and disturbance around service routes.
- Do not bury unsafe wiring, recessed fixtures, flues, or equipment without confirming required clearances and product compatibility.
- Keep soffit ventilation pathways open where the design uses them.
- Do not add insulation over wet materials before the source and drying are addressed.
- Photograph before and after energy or roofing work so disturbed areas can be identified.

PROFESSIONAL EVALUATION. Suspect hazardous material, including undisturbed vermiculite, must be assessed before disturbance. Have combustion clearances and electrical conflicts evaluated before adding insulation. Stop for active leakage, exposed wiring, or unsafe access.

Coordinate insulation additions with air sealing, moisture control, ventilation, and service access. Do not disturb suspect vermiculite or possible asbestos-containing material.

Ventilation without guesswork

More vents are not automatically better; the intake and exhaust path must work as a system.

Attic ventilation design varies. Intake openings near eaves and exhaust openings higher on the roof may be used, but mechanical systems, sealed attics, spray-foam assemblies, and conditioned attics follow different strategies. Adding a fan or vent without evaluating the assembly can draw conditioned air, rain, or combustion gases in unintended ways.

- Keep visible intake openings free of insulation and debris when they are part of the design.
- Look for staining or deterioration near vents and roof penetrations.
- Confirm bath and dryer exhausts reach the exterior through suitable ducts.
- Record spray-foam locations, product information, installer, ventilation changes, and equipment type.
- Coordinate reroofing, insulation, and HVAC changes so one contractor does not defeat another system.

PROFESSIONAL EVALUATION. Condensation, widespread sheathing staining, altered venting, combustion equipment in a modified attic, or unknown foam assemblies warrant coordinated specialist review.

Bath and dryer exhaust must reach the intended outdoor termination, not merely end near a roof vent.

Ducts, airflow, and comfort clues

A system can run while damaged ducts waste capacity and create moisture risk.

Comfort complaints may involve equipment, airflow, ducts, insulation, solar exposure, controls, or building leakage. Avoid replacing major equipment based on one symptom without appropriate diagnosis.

- Note rooms with weak airflow, persistent temperature difference, unusual dust, or odor.
- From safe locations, look for disconnected, crushed, kinked, torn, or poorly supported ducts.
- Watch for damaged insulation, exposed metal, condensation, and staining below ducts or boots.
- Keep supply registers and return grilles open and unobstructed unless the system designer directs otherwise.
- Do not use household tape as a durable duct repair; materials and preparation matter.
- Record whether symptoms change with filter replacement, weather, door position, or system runtime.



Stonebriar field photo: a non-contact thermometer reading at a supply register. Spot readings describe one moment; they do not diagnose the equipment.

PROFESSIONAL EVALUATION. Have a qualified HVAC provider assess damaged plenums, inaccessible disconnections, or suspected return-air contamination. Stop affected operation and arrange urgent service when condensation leaks threaten finishes or electrical equipment.

A closed bedroom door can change airflow when the return path is inadequate. Have the provider consider balancing, loads, and controls before recommending larger equipment.

NORTH TEXAS DATA

Ducts can waste a large share of conditioned air

ENERGY STAR estimates that in a typical house about 20 to 30 percent of the air moving through the duct system is lost to leaks, holes, and poorly connected ducts. In North Texas, many ducts run through attics that exceed outdoor temperatures in summer, so a disconnected duct can affect both comfort and moisture.

Source: ENERGY STAR (U.S. EPA), "Duct Sealing."

Interior finishes as evidence

Drywall, trim, flooring, and cabinets can show change without identifying the cause.

Record the exact location, date, weather, fixture use, HVAC operation, and recent work. A stain that is dry today may still represent an intermittent source.

- Ceiling or wall staining, blistered paint, swollen baseboards, musty odor, or soft material.
- Cracks that reappear, widen, or align with doors, windows, masonry, or floor changes.
- Flooring that cups, buckles, stains, or becomes loose near wet areas and appliances.
- Cabinet damage below sinks, beside dishwashers, refrigerators, tubs, and showers.
- Condensation on windows or vents during ordinary conditions.
- Tile/grout and caulk failures at wet areas, with attention to loose or soft backing.

URGENT SERVICE. Sagging ceilings, widespread soft material, active moisture, sewage, electrical exposure, or rapid change requires prompt professional response.

Record a stain's edge and timing before refinishing. An old-looking stain may still represent intermittent leakage.

Pests and concealed damage

Correct access and moisture conditions as well as the infestation.

Pest evidence can include droppings, shelter tubes, frass, wings, gnawing, nests, damaged screens, and disturbed insulation. Do not disturb suspected termite tubes or contaminated nesting material before documentation and evaluation.

- Photograph evidence and record the exact location and nearby moisture source.
- Keep vegetation, stored wood, cardboard, and debris from concealing the perimeter.
- Repair roof, plumbing, drainage, and ventilation conditions that support pests.
- Seal entry points only after confirming animals are not trapped inside and the opening is not a required vent or drain.
- Retain treatment diagrams, product records, warranties, and follow-up inspection dates.

URGENT SERVICE. Termite/WDI evidence, significant contamination, bats or protected wildlife, chewed wiring, or inaccessible nesting requires licensed or specialized help.

Treatment of pests and repair of damaged material may be separate scopes. Retain both records and the provider's follow-up requirements.

Termite and WDI prevention in Texas

Subterranean termites can reach wood through concealed routes, including cracks and service penetrations in slab construction. A slab home is not termite-proof. Shelter tubes, discarded wings, damaged wood, frass, and insects deserve identification; a photograph or sawdust alone does not identify the organism.

Include pest evidence in the monthly exterior and cabinet walk. Keep soil, mulch, firewood, cardboard, trellises, and stored items from bridging or hiding vulnerable wall areas. Maintain required clearances and visible inspection space. Repair plumbing leaks and persistent drainage or crawlspace moisture. Leave designed weeps and vents open.

Arrange a licensed termite/WDI inspection when evidence appears, after major changes that affect access or moisture, and at the interval required by an existing treatment contract. An annual professional check is a useful planning starting point in North Texas, adjusted to the property, prior infestation, treatment system, and provider advice. Hidden or inaccessible areas remain limitations.

Texas Department of Agriculture Structural Pest Control Service regulates structural pest-control work. Verify the business and the individual's appropriate termite category credentials. A TREC home-inspector license alone does not authorize a WDI inspection. A Texas real-estate WDI report and a treatment or warranty inspection serve different purposes; ask which report and scope you are purchasing.

Before treatment, obtain identification of the pest, a written scope and diagram, accessible and excluded areas, treatment approach, warranty terms, and follow-up obligations. Disturbing bait stations, removing treated soil, or covering inspection areas can affect protection and contract terms. Ask the provider before landscaping or remodeling.

[TDA Structural Pest Control Service licensing](#)



05

Plumbing and water heating

Supply leaks, drains, water heaters, and appliances cause many sudden water losses. Small monthly checks catch most of them early.

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Plumbing supply and fixture habits

Small leaks become expensive when cabinets and floors hide them.

For a no-use meter check, make sure irrigation, ice makers, water treatment, pools, and other automatic users are not operating. A changing meter can indicate use or leakage; it does not identify the source.

- Open sink cabinets monthly and look for drips, corrosion, mineral buildup, staining, swelling, or odor.
- Watch toilets for movement, loose bases, weak flushing, or continued running after the cycle.
- Inspect tubs, showers, and backsplashes for failed sealant, loose trim, and water escaping onto floors.
- Look behind and beside washing machines, refrigerators, dishwashers, and treatment equipment when safely accessible.
- Know fixture shutoff locations, but do not force old or corroded valves.
- Review water bills and investigate unexplained increases rather than assuming the utility rate changed.

URGENT SERVICE. Active leakage, a valve that will not close, water near electrical equipment, or suspected concealed damage requires prompt qualified response.

Tell the plumber whether leakage follows hot water, cold water, draining, or operation of an adjacent appliance.

9,300+

gallons of water lost to household leaks per average home each year

9%

of homes have leaks that waste 50 or more gallons per day

3,000+

gallons per year wasted by a faucet dripping once per second

≈10%

typical water-bill savings from fixing household leaks

Source: U.S. EPA WaterSense, "Fix a Leak Week" (updated March 2026). EPA suggests a 10-minute food-coloring test for toilet flapper leaks.



A Stonebriar inspection: checking the floor and cabinet base beside a sink with a flashlight. Monthly cabinet checks catch slow leaks before cabinets swell.



Checking a toilet for movement, leaks at the base, and continued running after the cycle.

Shutoffs and supply connectors

A valve or hose matters most when it still works under pressure.

Replacement intervals and approved connector types vary by manufacturer and installation. Follow product instructions and use the correct trade. After appliance movement or hose work, watch the first operating cycle and recheck the connections.

Component	Record and observe
Main shutoff	Location, access, label, last professional service
Fixture stops	Visible corrosion, leakage, secure connection; do not force
Washer hoses	Bulging, abrasion, corrosion, leakage, secure routing
Refrigerator line	Material, kinks, cabinet/floor staining, accessible valve
Dishwasher	Supply/drain connections and cabinet damage
Water treatment	Bypass, drain, power, leak history, service contact

PROFESSIONAL EVALUATION. Corroded valves, unsupported piping, damaged connectors, inaccessible leaks, or uncertain materials should be evaluated before failure.

Have a plumber identify and label the homeowner shutoff and explain a plan for an inaccessible or unreliable valve. Disturbing a seized valve can start a leak.

Older supply piping and polybutylene

Some older homes contain polybutylene water-supply piping. Have a licensed plumber identify suspected material by pipe markings, fittings, and the actual installation; color alone is not reliable. Polybutylene pipe and joint failures have been documented, but its presence does not mean every visible section is currently leaking.

A dry section or a short visual inspection cannot establish concealed condition or predict remaining life. Ask the plumber to document extent, accessible connections, prior leaks, water-pressure concerns, replacement options, and any temporary precautions. Keep the shutoff usable and plan a response for leaks while decisions are pending.

Replacement planning should include access openings, finish restoration, permits, testing, abandoned sections, and the materials used. Obtain a written scope rather than assuming a partial repair replaces the whole system. Other older piping, including corroded galvanized steel, also needs condition-based evaluation.

[HUD rehabilitation guide on plumbing materials](#)

Drains, traps, and backups

Repeated slow drainage is evidence - not an invitation to keep adding chemicals.

- Use strainers where appropriate and keep grease, wipes, hygiene products, and unsuitable materials out of drains.
- Note whether one fixture or several fixtures are slow, and whether gurgling or sewer odor occurs.
- Keep rarely used traps from drying out by running water when appropriate.
- Do not mix drain chemicals or use them repeatedly; they may damage materials and expose service personnel.
- Know the location of accessible cleanouts but do not open a pressurized or backing-up system without proper precautions.
- After a stoppage, record the affected fixtures, location cleared, method, camera findings, and removed material.

URGENT SERVICE. Sewage backup, repeated multi-fixture stoppage, leakage, or a line that cannot be safely accessed requires qualified plumbing response and appropriate cleanup.

Tell the plumber which drain products were used before service. Do not combine chemicals with mechanical clearing.

Buried sewer line records

A line can drain today while a defect or low area continues to develop.

Possible concerns include roots, offsets, scaling, debris, cracks, damaged fittings, and low areas that retain water. Camera visibility depends on the access point, line configuration, water, debris, and equipment. A sewer scope is useful evidence, not a guarantee of future performance.

- Retain the video, not only a verbal summary.
- Confirm which line was viewed and where the camera stopped.
- Before major landscaping or renovation, consider whether sewer routing and access should be documented.

Record	Keep
Property history	Prior stoppages, repairs, replacements, insurance events
Line context	Approximate age/material when documented, tree exposure, cleanouts
Scope record	Date, provider, access point, video/file, observed length
Limitations	Branches not viewed, obstruction, water/debris, inaccessible sections
Action	Cleaning, repair, monitor, further evaluation, next date

PROFESSIONAL EVALUATION. Backups, structural defects, inaccessible segments, or repair design require a qualified plumber or sewer professional.

A sewer camera does not necessarily establish pipe slope or every concealed condition. Keep access points, inspected length, limitations, and repair locations with the full recording.

Water-heater stewardship

Plan replacement before a tank failure in a finished or elevated location.

- Record manufacturer, model, serial number, fuel/energy source, installation date, capacity, installer, permit, and warranty.
- Watch for leakage, rust, corrosion, soot, unusual burner behavior, damaged venting, or water in the pan.
- Keep combustible storage away from fuel-fired equipment and maintain service access.
- Do not cap, plug, reduce, or improperly route the temperature-and-pressure relief discharge pipe.
- Arrange a professional water-heater review annually as a starting plan. Many tank models call for annual sediment flushing and anode review; use the actual manual and water conditions. Have a plumber select the procedure for an older heater with unknown service history rather than forcing a neglected drain valve.
- Confirm drain pans and drains remain visible and discharge as intended; a pan is not a repair for a leaking tank.

EMERGENCY. Gas odor, smoke, or an immediate electrical or fire threat means leave and call 911 or the utility from safety. **URGENT SERVICE.** Stop affected equipment safely and arrange qualified service for active leakage, relief discharge, damaged venting, or combustion concerns.

A dial marking is not a verified faucet temperature. Include delivery-temperature protection and any mixing valve in the service plan.

10–15 yrs

typical life of a storage (tank) water heater

≈20 yrs

typical life of a tankless water heater

≈18%

share of home energy use for water heating

Source: U.S. Department of Energy, Energy Saver, "Water Heating" and "Which Water Heater Is Right for You?" (2022). Actual life depends on water quality, installation, and maintenance.

Kitchen and appliance water risks

Check the hidden connections that operate while no one is watching.

Leak sensors or automatic shutoff devices can add warning and control, but they require correct placement, power/communication, periodic testing, and a plan for false alarms or valve failure.

- Inspect under the sink and around disposals, filters, instant-hot units, and supply connections.
- Look beside and below the dishwasher for staining, swollen toe-kicks, odor, or flooring change.
- Keep refrigerator water-line routing protected from pinching, abrasion, and appliance movement.
- Follow manufacturer instructions for cleaning filters, coils, condensate trays, and drains.
- After installation or movement, observe a complete fill/drain/ice cycle and recheck the floor and cabinet.
- Keep model/serial numbers, installer records, warranty, and shutoff location together.



A Stonebriar inspection: operating a dishwasher during an inspection. After installation or service, watch a complete cycle and recheck the floor and toe-kick.

URGENT SERVICE. A hidden appliance leak, damaged floor, inaccessible connector, or electrical exposure requires the appropriate appliance, plumbing, restoration, or electrical professional.

Provide an actual response plan for leak-sensor alerts when the home is empty. A warning without someone able to act may not limit damage.

Laundry and dryer safety

Water connections and exhaust both need routine attention.

A conventional vented dryer must exhaust outdoors through a suitable, unobstructed duct. Ventless condensing and heat pump models instead require their specified filters, heat-exchanger and condensate care. Do not operate any dryer with damaged electrical, gas, or exhaust components.

- Inspect washer hoses and connections for corrosion, bulging, abrasion, leakage, and secure routing.
- Keep the washer drain connection secure; watch the first cycle after appliance movement or hose work.
- Clean the dryer lint filter before or after each load.
- Have the full dryer exhaust path cleaned at least annually, as USFA recommends, and sooner with reduced airflow, longer drying, or heavy use. A roof termination or concealed duct needs a qualified provider. Follow a shorter manufacturer interval when specified.
- Inspect the transition duct for crushing, kinks, damage, and unsuitable material; the exterior damper should open during operation.

- Investigate longer drying times, excessive heat, burning odor, or lint accumulation.
- Keep storage and combustible materials away from appliances and service connections.

EMERGENCY. Leave and call 911 or the utility from safety for smoke, gas odor, or an immediate fire threat.

URGENT SERVICE. Stop the dryer for overheating or a burning smell and obtain evaluation. Active water leaks, damaged wiring, or a blocked exhaust need prompt qualified service.

Stop using a dryer that overheats or smells burned until evaluated. Check washer connections and the nearby floor after use and appliance movement without straining hoses.

NORTH TEXAS DATA

Dryer fires by the numbers

The U.S. Fire Administration estimates about 2,900 residential clothes dryer fires each year, causing an estimated 5 deaths, 100 injuries, and \$35 million in property loss. Failure to clean was the leading factor contributing to these fires (34 percent), and dryer fires peak in January. More recent national fire data show failure to clean contributing to 31 percent of home dryer fires in 2018–2020.

Sources: USFA, “Clothes Dryer Fires in Residential Buildings (2008–2010),” Topical Fire Report Vol. 13, Issue 7 (2012); USFA, “Appliance and Electrical Fire Safety.”

System record and next inspection

Turn observations into a durable ownership history.

Schedule the next check based on condition, manufacturer guidance, recent work, and risk – not an invented universal interval. High-consequence locations such as attic water heaters, second-floor laundry, and concealed appliance connections deserve a stronger leak-response plan.

System	Annual record
Water service	Main shutoff, pressure equipment, leak events, utility contacts
Fixtures	Recurring leaks, repair dates, parts, warranty
Sewer	Cleanouts, stoppages, videos, repairs, limitations
Water heater	Identity, age, service, pan/drain, replacement plan
Appliances	Water connections, install dates, repairs, shutoffs
Photos / files	Naming convention and storage location

SAFE PRACTICE. Use a professional home maintenance inspection when you need a whole-house visible-condition review; it does not replace trade-specific service or concealed testing.

Carry unresolved findings into the next service visit. Current condition and qualified diagnosis guide repair decisions more reliably than a generic expected service life.

Hot water without scalding

The thermostat setting and faucet temperature are different measurements.

Hot water can burn before someone has time to react. Children, older adults, and people with limited mobility or sensation need particular protection. CPSC recommends a residential heater setting of 120°F to reduce scald risk. Even that temperature can burn with prolonged exposure.

A dial marked “warm” does not verify the temperature delivered at a shower. Ask a plumber to assess delivery temperatures, shower controls, and any tempering or mixing valve. Do not remove an electric heater’s access panels to adjust a thermostat as a homeowner task.

Consider the complete system

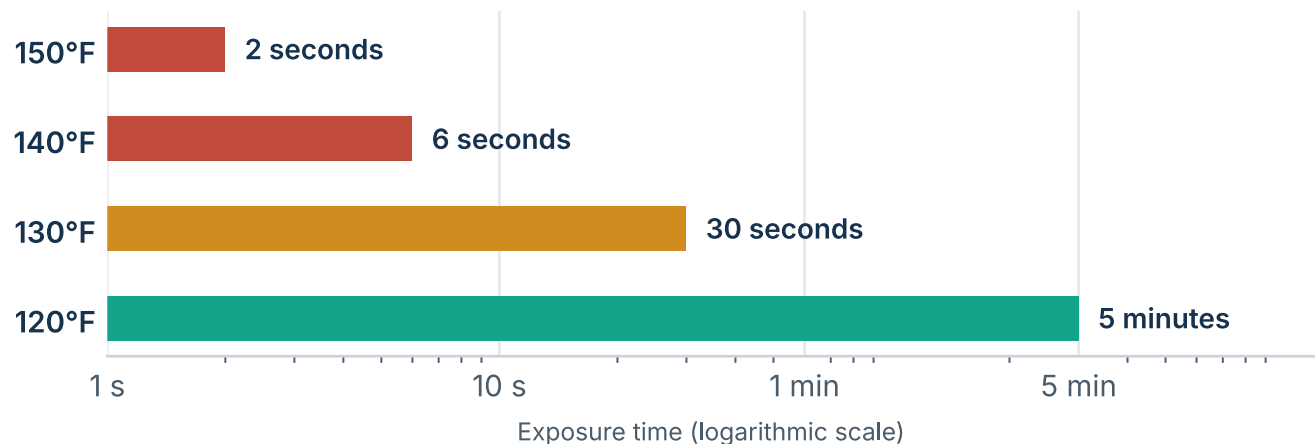
Storage temperature, delivered temperature, recirculation, equipment instructions, and control of waterborne bacteria belong in the same decision. Some systems intentionally store hotter water and depend on a maintained mixing valve to limit delivery temperature. Do not defeat that arrangement or assume lowering a dial resolves every risk.

Supervise bathing and check water before anyone enters. A sudden temperature change, a shower that becomes dangerously hot when another fixture runs, or an unreliable mixing control needs plumbing service. Keep the provider’s recommended setting and verification procedure with the equipment record.

- Record heater and mixing-valve models, location, service date, and plumber contact.
- Ask how your household should confirm safe delivery after service.
- Never use relief-valve discharge or a heater drain as a temperature-testing point.

Related guidance: source guide [07](#) (p. 116)

Time for hot tap water to cause a third-degree burn in most adults



Source: U.S. Consumer Product Safety Commission, “Avoiding Tap Water Scalds” (Pub. 5098). Children and older adults can be burned faster. DOE estimates that a heater set at 140°F can waste \$36–\$61 a year in standby heat losses compared with a lower setting, with further savings from reduced demand (Energy Saver).

Tank water heaters and safety controls

Recognize the parts without operating unfamiliar valves.

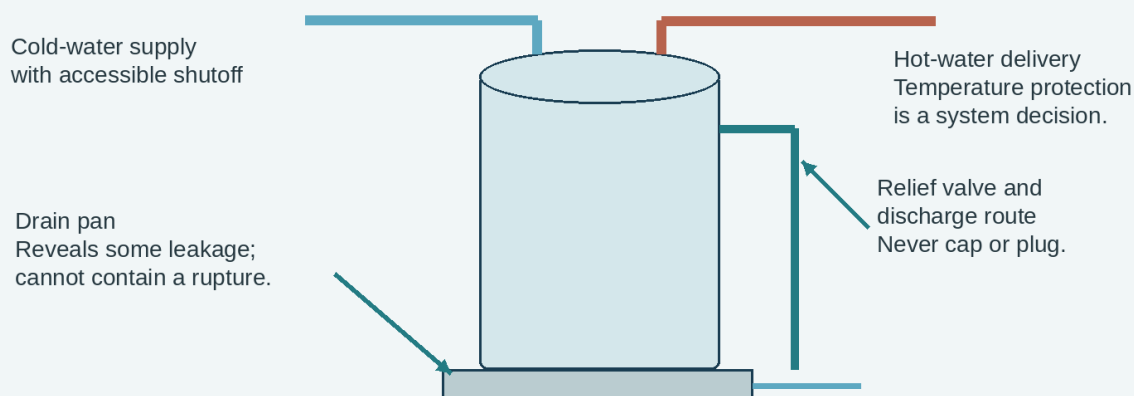
A storage heater keeps a reserve of hot water ready. Its controls, supply piping, relief valve, and drain pan perform different jobs. A pan may collect or reveal some leakage; it cannot contain a major tank rupture or make a leaking heater serviceable.

A wet relief outlet, corrosion at connections, a leaking tank, or repeated loss of hot water needs a plumber's diagnosis. Describe where water first appears and whether it happens during heating or fixture use. Do not assume water beside the tank came through the tank wall.



Stonebriar field photo: a freestanding tub with a hand shower. Delivered temperature at the fixture is what matters for scald protection.

Storage water heater: recognize the visible safeguards



Concept only. Energy source, valve locations, and discharge arrangement vary by installation.

- Never cap, plug, reduce, or redirect the temperature-and-pressure relief discharge yourself.
- Use annual professional service as a starting point for tank flushing and anode review; the manual and water quality set the actual intervals. Relief-valve testing and replacement should follow the model instructions and a plumber's plan, with safe discharge arrangements.
- A closed plumbing system may need expansion control. Dripping is a symptom to investigate, not a reason to add a plug.
- Keep attic and closet access clear. Ask how a leaking tank can be removed without damaging finished areas.

Tankless and heat pump water heaters

Different equipment needs a different maintenance plan.

Arrange annual professional tankless service as a starting plan. Heat-exchanger descaling may be needed annually or sooner in hard water; the model, measured water quality, use, and manufacturer requirements control the interval. Include inlet filters, combustion components, venting, isolation valves, and drains. Do not circulate a guessed chemical mixture through the unit.

Heat pump water heaters move heat from surrounding air into a tank. They need the manufacturer’s air volume or duct arrangement, filter care, service space, and condensate disposal. A cool utility room may be normal; standing water or a blocked air path is not.

Freeze protection needs a plan

Some tankless freeze features depend on electricity and protect only certain internal parts. They do not protect all exposed piping during an outage. Obtain written winterization and restart instructions for the actual installation before a freeze.

Record fault codes before service. Explain whether trouble occurs at one faucet or all fixtures, at low flow or high demand, and only in certain weather. Repeated resets can erase useful evidence without correcting a fault.

Equipment	Ask the provider
Tankless	Hardness, descaling interval, inlet filter, vent and drain checks
Heat pump tank	Filter, condensate route, operating modes, required air space
Recirculation	Pump schedule, check valves, temperature, leakage

Pressure, backflow, and water treatment

Measure the concern before buying or adjusting equipment.

Sudden pressure changes, pipe banging, repeated connector leaks, or relief-valve discharge deserve a plumber’s assessment. Regulators, expansion tanks, pumps, and valves are system components, not homeowner adjustment experiments. Ask for measured conditions and an explanation of the proposed repair.

Backflow protection helps keep contaminated water out of the drinking-water supply. Do not submerge a hose end in a pool, fertilizer bucket, or dirty container. Keep approved hose-connection protection in place. Have irrigation assemblies tested when required by the local water authority. A damaged assembly needs service, not removal.

A softener changes hardness; it does not automatically make unsafe water safe. Match filtration to a documented water concern and the contaminants the product is certified to reduce. Keep cartridge, sanitation, bypass, and drain instructions with the equipment.

Public-water customers can request the utility's annual water-quality report. Private wells need a separate testing plan. During a water advisory, follow current authority instructions; a household filter may not address the reason for the advisory.

- Record model, cartridge type, installation date, and provider.
- Watch treatment drains and nearby cabinets for leakage during operation.
- Use the responsible health authority and a certified laboratory for water-quality concerns.

Private wells and septic systems

Special systems need separate records and professional service.

A private well and a septic system are not maintained by the public utility. Locate them, retain installation records, and identify the responsible service providers. Keep vehicles, excavation, and new landscaping from damaging buried components.

EPA recommends annual well-water testing for total coliform bacteria, nitrates, total dissolved solids, and pH, with additional testing based on local risks or changed conditions. Flooding, a damaged cap, nearby contamination, or changes in taste or odor require advice about testing and safe use. Clear water is not proof of safety.

For many household septic systems, EPA describes professional inspection at least every three years and pumping typically every three to five years. Alternative systems and actual loading may require more frequent service. Follow the provider's written schedule; do not wait for sewage to surface.

Protect the disposal area

Keep roof runoff and other unnecessary water away from the drainfield. Conserve water, repair leaks, and use toilets and drains only for intended waste. Additives do not substitute for inspection or pumping.

Never enter a tank or lean into an opening. Toxic gases and collapse hazards can be fatal. Keep lids secured and children away. Sewage backup, surfacing effluent, or persistent odors require prompt professional attention.

Related guidance: source guide [09](#) (p. 116), [10](#) (p. 116)



06

Electrical and household safety

Know the electrical service, test protective devices, and keep alarms and escape plans current. Most household fire and injury risks are preventable.

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Know the electrical service

Identify controls without opening energized equipment.

Learn where the service disconnect and distribution panels are located. A home can have more than one panel and more than one power source. Solar equipment, generators, and batteries can complicate isolation. Ask an electrician to explain the actual arrangement and label it clearly.

Keep panel access dry and unobstructed. Read labels and observe the closed cabinet from a safe position. Missing covers, openings, rust, scorching, buzzing, or a burning odor need professional attention. Do not remove the dead front or reach inside a panel.

Make the directory useful

A circuit label should identify the rooms or equipment served. “Lights” is less useful than “upstairs hall and bedrooms.” Have inaccurate or incomplete directories corrected safely. Keep a copy with the emergency record, especially when a panel is outside or behind a locked door.

Adding an EV charger, workshop, hot tub, or large appliance changes electrical demand. Ask an electrician to evaluate capacity, circuit requirements, protection, and permits. A spare breaker position alone does not establish available capacity.

- Do not work on wet electrical equipment or stand in water to reach a disconnect.
- Do not repeatedly reset a breaker that trips; record what was operating and seek service.
- A tripped breaker is a warning, not permission to install a larger breaker.
- Follow [Electrical fire, arcing, or burning odor](#) (page 11) for electrical emergencies.

Older panels and aluminum wiring

Federal Pacific Stab-Lok equipment warrants evaluation by a licensed electrician familiar with that product. CPSC testing documented failures to meet certain calibration requirements. The agency’s closure of its investigation was not a determination that the breakers were safe. A normal-looking cabinet or years without trouble does not establish reliable protection.

Older Zinsco equipment and some related Sylvania-branded equipment deserve careful identification and evaluation by a licensed electrician. The name Sylvania alone does not identify a Zinsco design. Ask for a written assessment of the actual panel, breaker compatibility, condition, and replacement options; do not assume every panel bearing a broad brand name has the same construction.



A professional inspector examining an electrical panel. Homeowners should observe a closed panel from a safe position and never remove its cover.

Older solid aluminum branch-circuit wiring is a different issue from modern larger aluminum service or feeder conductors. Some older branch-circuit connections can overheat without an obvious outward warning. Have a qualified electrician identify the wiring and assess the complete repair approach using CPSC guidance. Ordinary replacement devices or casual retightening are not a dependable repair plan.

Do not remove a panel cover, intentionally overload a circuit, or operate breakers as an experiment to prove reliability. Ask the electrician about priority, permits, replacement scope, and interim precautions. Heat, burning odor, arcing, or smoke changes the response to urgent service or emergency action.

[CPSC Federal Pacific investigation statement](#)

[CPSC guidance on aluminum wiring repairs](#)

NORTH TEXAS DATA

Electrical fires at home

The U.S. Fire Administration reports 23,700 residential building electrical malfunction fires in 2023, resulting in 305 deaths, 800 injuries, and \$1.5 billion in losses. Over 2014–2023, these fires rose 2 percent and the dollar loss rose 28 percent after inflation.

Source: USFA, “Residential building electrical malfunction fire trends (2014–2023).”

GFCI protection and testing

Shock protection can be located upstream from the outlet you use.

The Consumer Product Safety Commission credits GFCIs with “a key role in reducing electrocutions” and advises testing GFCIs and AFCIs monthly.

A ground-fault circuit interrupter detects certain current imbalances and interrupts power to reduce shock risk. It does not prevent every shock, replace grounding, or make damaged equipment safe. Protection can be provided by a receptacle or a breaker, sometimes serving several downstream outlets.

Test GFCIs at least monthly and according to the device instructions. Plan the interruption first: a protected circuit may supply a freezer, pump, alarm accessory, or equipment in another room. Confirm what loses power and restore normal operation after a successful test.

A failed test needs attention

If the device does not trip or reset as instructed, stop relying on that protection and contact an electrician. Do not bypass it, replace it with an ordinary outlet, or hold the reset button to maintain power. Moisture or a faulty appliance may be the cause of repeated trips.

A plug-in tester provides limited information. It does not establish the condition of concealed wiring or replace the device’s own test procedure. Ask an electrician to assess missing protection using the home’s installation history and current local requirements.

Record	Useful detail
Location	Device and downstream outlets served

Record	Useful detail
Result	Date, test response, successful reset
Failure	What was connected; moisture or recent work
Follow-up	Electrician, correction, and next test

Related guidance: source guide [01](#) (p. 116)

AFCI and GFCI do different jobs

Similar test buttons do not mean identical protection.

An arc-fault circuit interrupter is intended to interrupt certain hazardous arcing conditions that can start fires. A GFCI addresses ground-fault shock hazards. A dual-function device can provide both protections. Read the actual label and manual rather than identifying a device by appearance alone.

Follow the AFCI manufacturer’s test interval and procedure. After a trip, note the device’s indicator or fault code before resetting if the instructions allow it. Record which appliances were operating and whether the problem followed recent electrical work.

Two protective functions — one device may provide both

GFCI



Ground-fault imbalance
Helps reduce shock risk
Test under the instructions

AFCI



Hazardous arcing
Helps reduce fire risk
Test under the manual

Repeated trips are a reason for diagnosis, not bypassing protection.

Neither device makes damaged wiring or unsafe appliance use acceptable.

- Do not replace protective devices with ordinary breakers to stop trips.
- Repeated trips, heat, damaged cords, or burning odors require professional evaluation.
- An AFCI is not a substitute for smoke alarms, sound wiring, or safe appliance use.
- Have an electrician determine the correct listed device and protection for the actual circuit.

Related guidance: source guide [01](#) (p. 116), [02](#) (p. 116)

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Cords, lights, and everyday loads

Heat and damaged connections are practical warning signs.

Check frequently used cords and plugs for crushing, cuts, exposed conductors, loose pins, or heat discoloration. Stop using damaged equipment. Do not route cords under rugs, through doors, or where furniture can crush them. Extension cords are temporary tools, not permanent wiring.

Plug portable heaters and other high-load appliances into the appropriate wall outlet under their instructions. A power strip does not increase a circuit's capacity. Do not connect power strips in a chain or use an adapter to defeat grounding.

Lighting and charging

Use lamps and bulbs within the fixture's rating and specified type. A flickering light may be a loose bulb, but repeated flicker across several circuits, a hot switch, or a burning smell needs an electrician. Turn off a fixture before an ordinary bulb change and let it cool.

Charge batteries with the specified compatible equipment on a suitable surface, away from exits and combustible clutter. Swelling, unusual heat, leakage, smoke, or hissing is a reason to stop use and follow emergency guidance. Do not charge a damaged battery or improvise repairs.

Outdoor equipment needs the correct outdoor rating and electrical protection. Keep connections out of standing water and protected as designed. A cover does not make an indoor device suitable for wet use.

Related guidance: source guide [03](#) (p. 116)

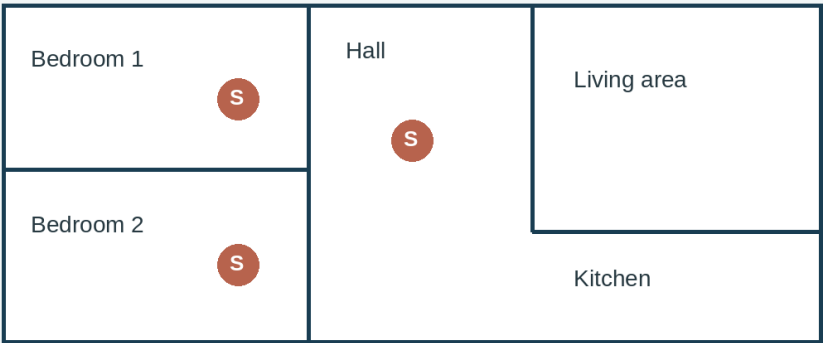
Smoke alarms and escape planning

A working alarm needs a workable way out.

USFA recommends smoke alarms inside each bedroom, outside sleeping areas, and on every level. Use the manufacturer's placement directions and applicable local requirements. Interconnected alarms help occupants hear a warning throughout the home; plan accessible alerting for anyone who may not hear a standard alarm.

Test monthly using the prescribed method. Replace alarms at their specified end of life; USFA's general guidance is ten years from manufacture for smoke alarms. Do not infer the date from when you moved in. Never remove a battery to silence an unresolved nuisance alarm.

Smoke-alarm planning: a simple single-level example



S Smoke alarm

Inside bedrooms
Outside sleeping areas
On every level

Follow placement instructions. Plan accessible warning and escape.

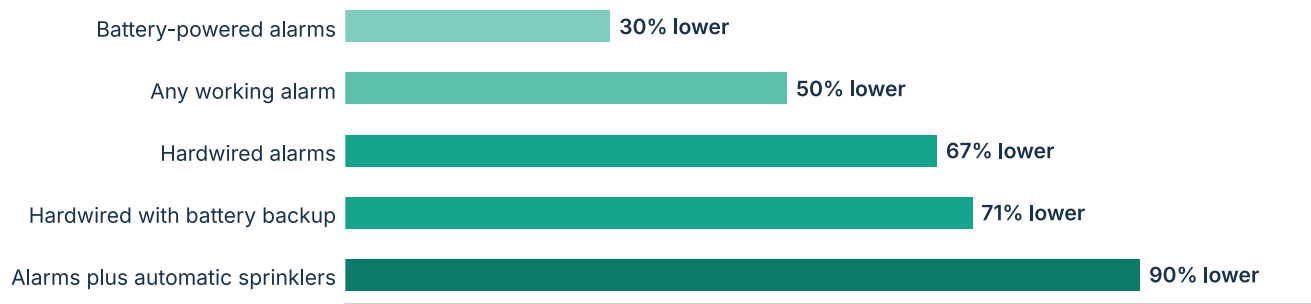
Example only, not an installation plan. Actual coverage and locations depend on the home and requirements.

- Know two ways out where feasible, an outdoor meeting place, and who assists children or others needing help.
- Keep escape windows and doors usable; never block a required exit with storage.
- Practice the household escape plan and stay outside after evacuating.
- A sounding alarm or visible smoke is an emergency. Leave first and call from safety.

Related guidance: source guide [04](#) (p. 116)

Three of every five home fire deaths (59 percent) occur in homes with no smoke alarms (43 percent) or with alarms that failed to operate (16 percent). Working alarms cut the death rate per 1,000 reported home fires by about 60 percent.

Reduction in the home-fire death rate compared with homes with no alarms and no sprinklers



Source: National Fire Protection Association (NFPA), "Smoke Alarms in U.S. Home Fires," June 2024 (2018–2022 data).

Carbon monoxide alarms and response

You cannot see or smell carbon monoxide.

Fuel-burning equipment, vehicle exhaust, and portable generators can produce carbon monoxide. A home may have exposure even when the main heating system is electric. CO alarms provide warning but do not replace proper installation, venting, and equipment maintenance.

Test CO alarms monthly using their instructions. Follow the manufacturer and local requirements for placement, cleaning, batteries, and replacement. USFA recommends alarms on each level and outside sleeping areas. CO service life varies by model; record the replacement date or end-of-life signal rather than assuming the smoke-alarm ten-year interval applies.

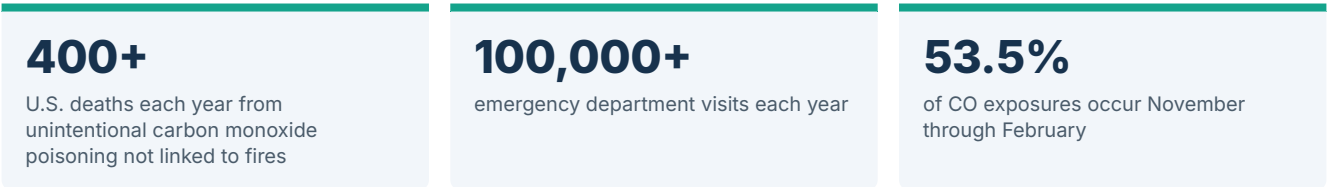
Treat an alarm as real

Move everyone to fresh air and call emergency services from a safe location. Do not remain inside searching for the source or repeatedly reset the alarm. Do not reenter until responders say it is safe. Report symptoms and seek medical help when indicated.

Never idle a vehicle in an attached garage, even with the exterior door open. Never use a grill, camp stove, or oven to heat the home. A cracked window or open garage door does not make indoor combustion equipment safe.

After an event, retain the responders’ findings and have the responsible system professionally evaluated before reuse. A silenced alarm is not proof that the cause is corrected.

Related guidance: source guide [05](#) (p. 116)



Sources: CDC, “About Carbon Monoxide Poisoning” (updated January 2026); CDC MMWR 60(30), “Carbon Monoxide Exposures — United States, 2000–2009” (2011).

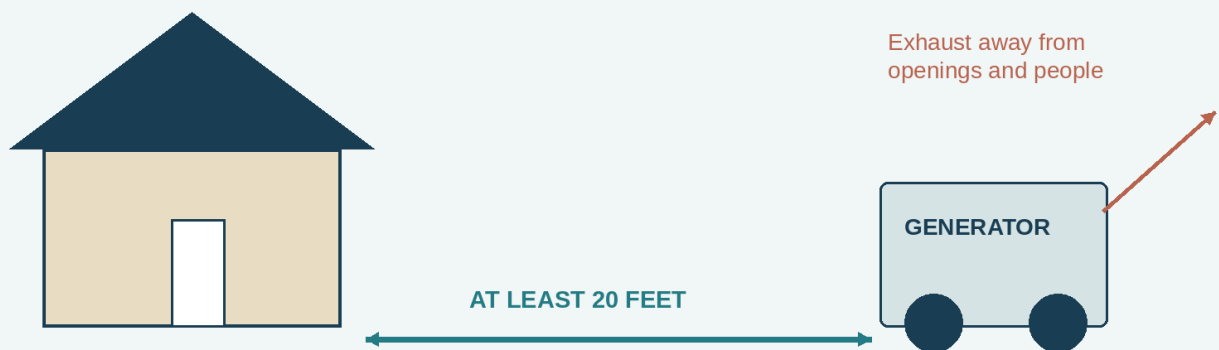
Generators, solar, and stored power

An outage does not remove every electrical hazard.

Operate a portable fuel-powered generator outdoors, at least 20 feet from the home, with exhaust directed away from doors, windows, and vents. Follow CPSC and manufacturer guidance. Never run it in a garage, porch enclosure, or other partly enclosed space.

Connecting a generator to house wiring requires approved transfer equipment installed by a qualified electrician. Never feed power into a wall receptacle. Backfeeding can endanger utility workers and occupants. Use appropriate cords only as the equipment instructions allow; keep them dry and protected.

Portable generators: keep exhaust away from the home



Never indoors or in a garage. Never feed power into a wall outlet.

Use approved transfer equipment for house wiring. Follow CPSC and manufacturer instructions.

- Let a generator cool before refueling and store fuel safely.
- Solar and battery equipment may remain energized after a main switch is opened. Have a professional explain disconnects and emergency labels.
- Do not touch damaged solar wiring, flooded batteries, or storm-damaged equipment.
- Record the outage plan before you need it, including essential loads and safe shutdown.

Related guidance: source guide [06](#) (p. 116)

Fire prevention at home

Reduce ignition sources and make escape easier.

Stay attentive while cooking. Keep towels, packaging, and other combustible items away from cooking surfaces. Maintain range ventilation and grease filters as directed. If a fire develops, prioritize evacuation and emergency help; do not carry a burning pan through the home.

Keep portable heaters away from combustible materials by the manufacturer's required distance. Place them on a stable surface and follow instructions for attendance and electrical connection. Keep them out of exit paths and away from water. Do not use an oven for space heating.

Fireplaces and chimneys

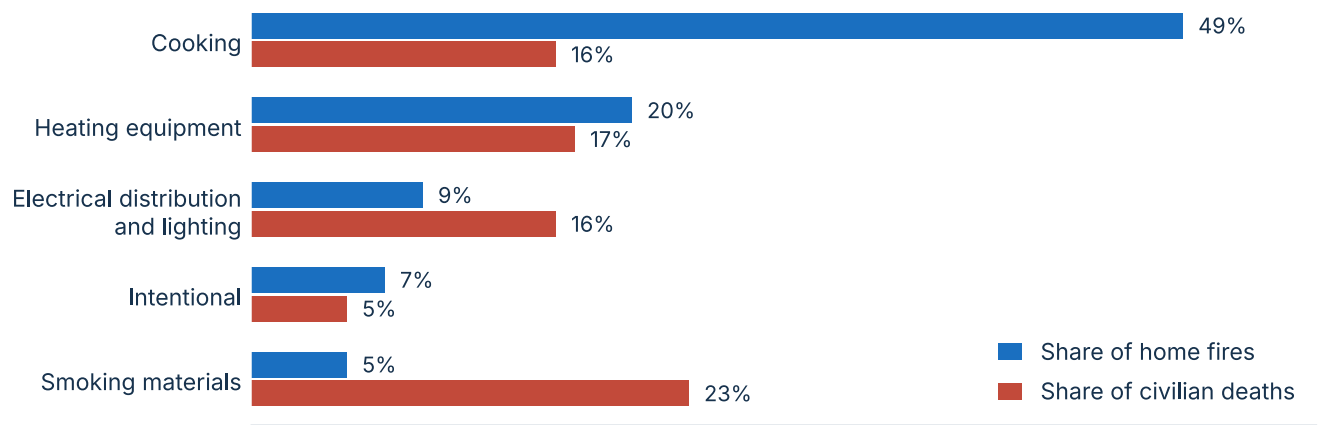
Have fireplaces, chimneys, and vents inspected by a qualified provider annually, with cleaning when needed and before reuse after a suspected chimney fire. Wood-burning, decorative gas, and sealed-combustion systems have different requirements. Do not block combustion air, improvise gas-log installation, or burn unapproved material.

Keep an appropriate extinguisher accessible and learn its limitations. It is for a small, contained fire only when you are trained, have a clear exit, and emergency help is being summoned. Do not let an extinguisher delay leaving a growing fire.

Review the escape plan after a furniture change, renovation, new household member, or mobility change. Correct blocked exits immediately.

Related guidance: source guide 03 (p. 116), 04 (p. 116)

Leading causes of U.S. home structure fires: share of fires vs. share of deaths



Source: NFPA, "Home Structure Fires," August 2025 (2019–2023 annual averages: 328,590 fires, 2,600 civilian deaths, \$8.9 billion in direct property damage). Cooking starts the most fires; smoking materials cause the most deaths.

Falls, children, and hazardous materials

Ordinary rooms can hide preventable injuries.

Walk through the home at night with normal lighting. Check stairs, loose rugs, unstable furniture, slippery bath areas, and routes to exits. Maintain secure handrails and suitable lighting. Use a proper step stool for accessible tasks; do not stand on chairs or attempt roof and attic access as routine maintenance.

Secure furniture and appliances as directed, including anti-tip protection where applicable. Keep cords, cleaners, medicines, and small batteries away from children. Window screens are not fall barriers. Any window guard must preserve required emergency escape.

Before disturbing older materials

Paint in homes built before 1978 may contain lead. Suspect insulation, flooring, texture, and other materials may contain asbestos. Appearance alone cannot identify either hazard. Seek qualified assessment before sanding, drilling, cutting, scraping, or demolition.

Do not disturb suspect material to obtain a casual sample or vacuum debris with an ordinary household vacuum. Use appropriately qualified contractors and required protective practices. Keep occupants away from damaged material pending advice.

Record the location of known hazards and provide that information to future contractors before work. A repair scope should include protection of occupied areas, cleanup, and the method of verifying that work is complete.

Related guidance: source guide 16 (p. 117), 17 (p. 117)

NORTH TEXAS DATA

Falls are the leading home-injury risk for older adults

More than one in four adults age 65 and older falls each year. Falls among older adults lead to about 4.5 million emergency department visits and about 319,000 hip-fracture hospitalizations annually. Handrails, lighting, and secure rugs are inexpensive, high-value corrections.

Source: CDC, "Facts About Older Adult Falls" (reviewed September 2026).

The electrical and safety handoff

Give the right provider usable observations.

A useful service request describes the location, symptom, timing, and conditions. “The kitchen counter outlet trips when the kettle runs” is more useful than “the electricity is bad.” Photograph visible labels or damage only from a safe position.

Ask the electrician to identify the cause, the proposed correction, needed permits, and how safe operation will be verified. Keep the invoice and corrected circuit directory. New EV charging, solar, storage, hot tubs, or major appliances should prompt review of the complete installation.

Close the loop

A repair is not complete because a symptom briefly disappears. Confirm that covers are installed, protective devices operate under their test instructions, affected equipment has power, and labels reflect the work. Ask when to call back.

Homeowners should not open panels, replace protective devices experimentally, defeat grounding, or work on energized wiring. Stop and seek help when access is wet, damaged, hot, noisy, or uncertain.

Observation	Provider information
Repeated trip	Circuit label, connected loads, time, recent work
Alarm issue	Model, date, warning pattern, test result
Heat or odor	Exact location; emergency action already taken
New equipment	Model, electrical demand, intended location
Closeout	Correction, test evidence, permit record, next action



07

HVAC and indoor air

Comfort depends on airflow, drainage, controls, and moisture management, not equipment alone. In North Texas, cooling systems work near capacity for months.

How the HVAC system works	66	Heat pumps and electric heating	69
Filters and airflow	66	Ducts, exhaust, and ventilation	70
Outdoor equipment and thermostat care	67	Humidity and indoor air quality	70
Condensate drainage and overflow	68	Water damage and mold decisions	71
Furnaces and combustion safety	69	The HVAC service record that matters	71

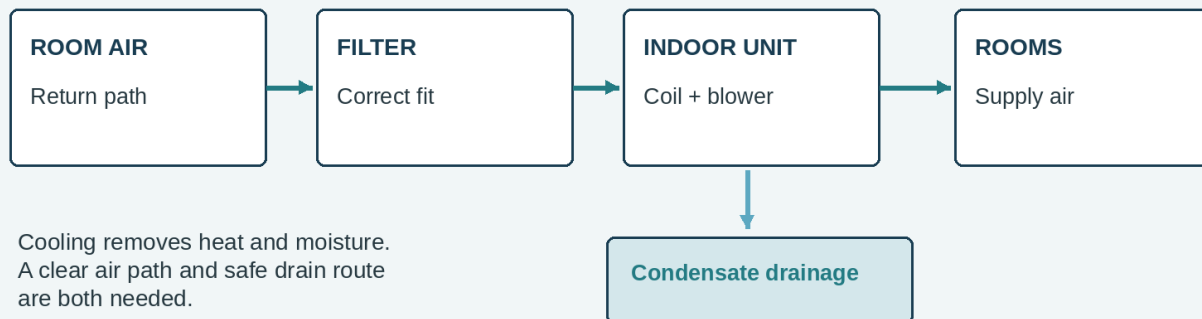
How the HVAC system works

Comfort depends on air, heat transfer, drainage, and controls.

A typical split system uses indoor and outdoor equipment linked by refrigerant piping, electrical controls, and ducts. The blower moves air through a filter and coil, then supplies conditioned air to rooms. Return paths bring room air back. A thermostat requests operation; it does not measure every room.

Cooling removes both heat and moisture. Collected moisture must drain safely. Heating may use a furnace, electric resistance elements, or a heat pump. Know the actual equipment before applying a checklist.

HVAC: follow the air path and the water path



Simplified sequence. Filter and blower positions, heating type, and accessories vary.

- Keep supply and return openings clear; furniture can obstruct comfort even when equipment runs.
- Record each system's model, location, rooms served, filter, and service contact.
- Weak airflow, new noise, icing, water leakage, or repeated trips needs diagnosis.
- Do not remove equipment panels, handle refrigerant, or bypass safety switches.

Related guidance: source guide [08](#) (p. 116)

Filters and airflow

The best filter is one the system can use correctly.

Check HVAC filters monthly, especially during heavy use. For many ordinary disposable filters, replacement every one to three months is a practical starting interval. Thicker media and washable products follow their own instructions. Replace or clean sooner when loaded; pets, dust, construction, occupancy, and long operating hours can shorten the interval.

Record the exact dimensions, thickness, type, and location. Some homes have filters at return grilles; others have a cabinet by the equipment. Do not add an extra filter in series without the HVAC provider's approval. Follow the airflow arrow and ensure the filter fits without gaps or bending.

Efficiency is not the only selection factor

Higher particle-removal ratings can increase resistance to airflow. Have the provider select a filter compatible with the blower, cabinet, ducts, and household needs. An unsuitable filter can reduce airflow and comfort even if its label sounds better.

Use the safe shutdown procedure for filter access. Do not reach into a blower cabinet or disturb wiring. If access requires an unsafe ladder position or entry into a hot, poorly supported attic, arrange service.

A filter repeatedly wet, collapsed, unusually dirty, or bypassed at its edges points to a problem beyond ordinary replacement. Photograph it and ask for evaluation.

Keep in the record	Why
Size and approved type	Avoids guesswork at purchase
Installed and checked dates	Shows actual service pattern
Condition and symptoms	Helps diagnose airflow or moisture concerns

Related guidance: source guide 08 (p. 116), 12 (p. 116)

The U.S. Department of Energy notes that replacing a dirty, clogged filter with a clean one can lower an air conditioner’s energy consumption by 5 to 15 percent, and recommends cleaning or replacing filters every month or two during the cooling season.

Source: DOE Energy Saver, “Maintaining Your Air Conditioner.”

Outdoor equipment and thermostat care

Protect airflow and use controls consistently.

Keep vegetation and stored items clear of outdoor equipment to the manufacturer’s specified distances. Do not stack pots, covers, tools, or fencing against the coil. Observe from outside the cabinet for debris, corrosion, damaged insulation, or unusual vibration.

Turn off the system and obtain professional advice when the unit is iced, making severe noise, or showing electrical damage. Do not chip ice, bend coil fins, open electrical compartments, or spray pressure-washer water into the equipment. Coil cleaning must follow the approved procedure.

Let the thermostat do its job

Learn normal operating modes, schedules, batteries, and alerts. Make gradual changes and allow the system time to respond. A very low cooling setting does not repair poor airflow or make a malfunctioning system cool faster.



A Stonebriar inspection: operating a thermostat during an inspection to confirm the system responds in heating and cooling modes.

After a smart-thermostat replacement, confirm that the settings match the equipment type, stages, and accessories. Incorrect configuration can impair comfort or waste energy. Have a provider handle incompatible wiring or uncertain setup.

Keep a short record of room temperature, outdoor conditions, setpoint, run behavior, and whether doors are open. That evidence helps distinguish a control problem from airflow, load, insulation, or equipment issues.

Related guidance: source guide [08](#) (p. 116)

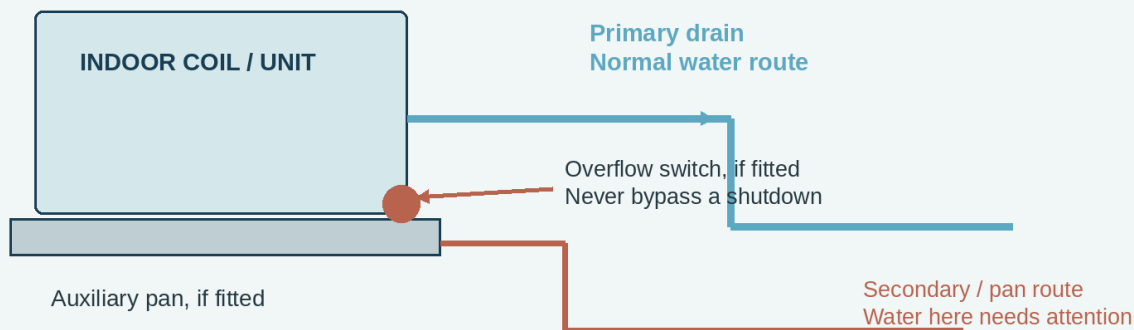
Condensate drainage and overflow

A small drain can cause a large interior water loss.

Cooling coils collect water that should travel through the designed condensate drain. Some installations include a secondary drain, auxiliary pan, and overflow switch. These features serve different purposes; not every installation has the same arrangement.

Have the HVAC provider identify the primary discharge, any secondary outlet, pan, and switches. A secondary outlet that begins dripping may be warning of a blocked primary drain. Water in an auxiliary pan is a reason to investigate, not routine operation.

Condensate protection: normal flow and warning paths



Actual drain and switch arrangements vary. Have the HVAC provider identify and maintain your system.

- Stop cooling safely and call for service if water is leaking, the pan is filling, or an overflow device has shut the system down.
- Do not bypass a float switch to restore cooling.
- Have the HVAC provider inspect and service condensate drainage during spring cooling service and set any additional cleaning interval. Look monthly during cooling season for accessible leaks or abnormal secondary discharge. Use only the approved cleaning method; do not pour chemicals into unknown piping.
- Keep drains and service routes accessible. Record the cause and correction of every recurring clog.

Related guidance: source guide [08](#) (p. 116)

Furnaces and combustion safety

Heating service must include the air and exhaust paths.

A fuel-burning furnace needs an appropriate fuel supply, combustion air, venting, controls, and airflow. Do not block openings, store combustibles beside equipment, or enclose a furnace without a qualified design review. Different furnace types use different intake and exhaust arrangements.

Arrange seasonal professional heating service. Ask for written findings on operation, venting, safety controls, and any concerns requiring follow-up. A thermostat producing warm air does not establish safe combustion or a sound heat exchanger.

Warning signs

Gas odor, a CO alarm, soot, scorching, damaged venting, repeated safety shutdown, or unusual combustion noise needs prompt action. Follow the [gas](#) (page 13) and [CO](#) (page 12) emergency pages. Do not relight or reset equipment repeatedly when a fault persists.

High-efficiency furnaces can produce condensate. Their drainage and venting requirements differ from conventional equipment. Report recurring drain faults, corrosion, ice at terminations, or water around the furnace. Do not modify vent materials, slope, or connections yourself.

Keep the equipment accessible and retain the model, fuel type, service report, and next appointment. If an HVAC contractor recommends replacement, ask which finding supports that recommendation and what temporary operating limits apply.

Related guidance: source guide [05](#) (p. 116), [08](#) (p. 116)

Heat pumps and electric heating

Understand normal winter behavior before assuming a failure.

A heat pump moves heat between indoors and outdoors. In heating mode, the delivered air may feel less hot than furnace air while still warming the home. Some systems use auxiliary electric heat during cold weather or recovery. The thermostat must match the equipment and control strategy.

Outdoor defrost cycles can briefly change sounds, stop a fan, or produce vapor. Persistent heavy ice, repeated inability to heat, severe vibration, or an electrical odor needs professional evaluation. Do not chip ice or obstruct the outdoor coil.

Controls and outage recovery

Ask the provider when auxiliary or emergency heat should operate and what a specific alert means. Do not assume “emergency heat” is the normal setting for every cold day. Keep written instructions where another household member can find them.

After an outage, follow the equipment’s restart guidance. Protect vulnerable piping and occupants while waiting for service. Portable heaters require their own electrical and fire precautions; they are not permission to overload a circuit.

Electric resistance heating still involves high electrical loads, airflow requirements, and safety controls. A lack of fuel piping does not make equipment safe to open or repair as a homeowner task. Refrigerant, wiring, and heating-element work belong to qualified providers.

Related guidance: source guide [08](#) (p. 116)

Ducts, exhaust, and ventilation

Comfort problems may start outside the equipment cabinet.

Leaking, disconnected, crushed, or poorly insulated ducts can waste energy and affect comfort. A room that changes markedly when its door closes may have an airflow or return-path problem. Describe the pattern to the HVAC provider before buying a larger system.

Bathrooms, kitchens, and dryers need their intended exhaust paths. A recirculating range hood captures some particles and grease but does not remove cooking moisture outdoors. Do not vent a dryer or bath fan into an attic, garage, or crawlspace.

Fresh air is a system choice

Some homes have dedicated outdoor-air equipment, energy-recovery ventilation, or controls connected to the main blower. Learn the filters, cleaning needs, and operating instructions. Sealing a home or adding a powerful exhaust appliance may change ventilation balance and warrants a coordinated assessment.

Do not close many supply registers as an experiment to force air elsewhere. Have the provider evaluate balancing, return paths, duct condition, and controls.

Routine duct cleaning is not a universal maintenance requirement. Ask what evidence supports it and how the source of dust, moisture, or contamination will be corrected. Cleaning cannot repair a leaking duct, wet insulation, or inadequate airflow.

Related guidance: source guide [12](#) (p. 116), [13](#) (p. 116)

Humidity and indoor air quality

Measure patterns and correct sources before adding products.

Use a hygrometer to record indoor relative humidity, allowing for sensor accuracy and location. Keep it away from direct supply air, showers, and sunlight. EPA recommends humidity below 60 percent, ideally 30–50 percent where practical. Cold surfaces can still collect condensation under some conditions.

Start with sources: active leaks, wet materials, bathing and cooking moisture, outdoor-air leakage, or poor cooling control. Use intended exhaust ventilation. Recurring condensation at windows, ducts, or registers needs investigation, not wiping alone.

Air cleaning has limits

A portable particle cleaner should be sized for the room and operated and maintained as directed.

Filtration does not remove every gas or replace ventilation. Avoid devices intentionally producing ozone in occupied rooms. Fragrance can hide an odor without correcting its source.

Radon cannot be seen or smelled. A test is needed to know the level in a particular home; a neighbor’s result or a normal inspection does not establish yours. Follow EPA and state testing and mitigation guidance.

Seek medical advice for health symptoms. Building measurements help investigate conditions; they do not diagnose a person. Keep a log of humidity, temperature, weather, occupancy, and equipment mode to support the building assessment.

Related guidance: source guide [11](#) (p. 116), [12](#) (p. 116), [14](#) (p. 116)

Water damage and mold decisions

Source control and safe drying matter more than guessing at color.

Mold needs moisture. Its color does not identify its species, health significance, or full extent. Document the location and water history, then correct the source. EPA advises drying wet materials within 24–48 hours when possible. This is a response goal, not proof that growth has not occurred.

Sewage, widespread damage, hidden growth, suspected HVAC contamination, and health concerns warrant qualified help. Do not run a system suspected of mold contamination until appropriately evaluated. Do not point fans across sewage or disturbed contaminated materials.

Close the moisture event

Have the provider identify what can be dried, what needs removal, how surrounding areas will be protected, and how dryness will be verified. Surface dryness alone does not prove that a wall cavity, cabinet base, or floor assembly is dry.

Painting, deodorizing, or fogging without moisture correction and necessary cleaning does not complete the repair. Never mix bleach with ammonia or other cleaners. Follow product labels and professional remediation instructions.

Keep the source repair, drying scope, dated photographs, and verification results together. If odor or staining returns, reopen the investigation rather than repeating cosmetic work.

Keep	Purpose
Source and correction	Explains why recurrence is less likely
Drying or removal scope	Identifies affected materials and areas
Verification and recheck	Records findings after repair and later rain or use

Related guidance: source guide [11](#) (p. 116)

The HVAC service record that matters

Ask for findings you can use through the next season.

A service invoice should identify the actual equipment and work, not simply say “tune-up.” Keep findings, measured results where relevant, recommendations, and access limitations. The scope should follow the equipment and installation, not a universal checklist.

Before approving replacement, ask whether the diagnosis considered ducts, airflow, insulation, controls, electrical supply, and heating and cooling loads. A larger unit is not automatically more comfortable or better at humidity control. Obtain an itemized scope and warranty terms.

After work, confirm normal controls, clear access, correct filter installation, drainage, and cleanup. Ask when to call back and what symptoms mean the system should be stopped. Record the next service dates.

Repeated refrigerant additions, clogged drains, icing, and safety trips are recurring problems to investigate. Keep an unresolved issue open until it has a responsible provider and a follow-up date.

Service area	Useful written evidence
Identification	Model, serial, location, rooms served
Cooling	Coil, airflow, drainage, refrigerant findings
Heating	Combustion or electric-heat checks; vents
Controls	Start/stop sequence and safety checks
Recommendations	Urgency, reason, alternatives, limitations
Closeout	Parts, warranty, next action and date

Related guidance: source guide [08](#) (p. 116)



08

Garage, site, pools, and spas

Garage doors, walking surfaces, trees, retaining walls, irrigation, and pools carry stored energy and real injury risk.

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Garage doors and stored energy

Springs, cables, and bottom brackets are not adjustment points for homeowners.

A sectional door is heavy. Springs counterbalance its weight; the opener should not compensate for a damaged or unbalanced door. Broken springs, frayed cables, loose tracks, bent panels, or a door hanging unevenly require a qualified technician. Keep people away until repaired.

Watch normal operation from a safe position. Jerking, scraping, severe vibration, binding, or unexpected reversal needs attention. Do not test a visibly damaged door to see whether the opener can force it through a cycle.

Garage-door safety: observe moving parts from clear space



Test photoelectric protection and contact reversal using the opener manual.

Do not adjust springs, cables, bottom brackets, or closing force to defeat a fault.

- Keep fingers away from panel joints and tracks, and children away from controls.
- Never loosen spring hardware, cable drums, bottom brackets, or track supports.
- Lubricate only the specified parts with manufacturer-approved products; do not coat tracks and sensors indiscriminately.
- Keep the opener model and door service record. A new opener does not correct a damaged door.

Related guidance: source guide [20](#) (p. 117)

Garage door safety checks

Photoelectric and contact-reversal tests are different checks.

Photoelectric sensors detect an obstruction across the opening. Contact reversal responds when the door meets the specified test object. Passing the photo-beam test does not demonstrate that contact reversal works.

Use the manufacturer's monthly safety-test procedure. Keep people clear and use the specified object and position. Never use a hand, foot, child, or pet. If you do not have the manual or cannot safely perform the test, have a technician demonstrate it during service.

A failed test means stop

If the door does not respond as instructed, discontinue automatic operation and obtain service. Do not increase closing force, hold controls to defeat a fault, or reposition sensors to bypass them. Clean accessible lenses only as the instructions permit.

Learn the emergency release procedure before an outage. Do not release an open, damaged, or unbalanced door; it can fall. Have a technician explain safe manual operation for the particular door. Review backup-battery testing and replacement if fitted.

Keep remotes secure and wall controls out of children's reach. Check that the opening is clear during every cycle. Record both protective tests, results, and corrective work in the safety log. A partial test should be marked "not completed," with a service date.

Related guidance: source guide [20](#) (p. 117)

NORTH TEXAS DATA

Why the reversing test matters

Federal rules require automatic garage-door openers manufactured since January 1, 1993 to include external entrapment protection, such as photoelectric sensors or a door-edge sensor, after the CPSC documented dozens of child entrapment deaths. CPSC recommends inspecting the door and opener every 30 days, including the reversing feature, and mounting photo eyes 4 to 6 inches above the floor. Follow your opener manual for the exact test.

Sources: CPSC, "Safety Commission Publishes Final Rules for Automatic Garage Door Openers" (1992); CPSC Pub. 523, "Non-Reversing Automatic Garage Door Openers Are a Hazard."

The garage boundary and safe storage

Keep fumes, heat, and stored hazards out of living spaces.

The wall, ceiling, door, and penetrations between an attached garage and the home help separate the spaces. Damaged finishes, open penetrations, a poorly fitting door, or an improvised vent can weaken the assembly. Have repairs matched to its design and applicable requirements.

Never idle a vehicle in an attached garage, even with the exterior door open. Exhaust can enter living spaces. A CO alarm provides additional warning; it does not make indoor idling safe. Do not prop the house door open while combustion equipment runs nearby.

Storage changes the risk

Keep fuels, solvents, chemicals, paint, and batteries in appropriate labeled containers under their storage instructions. Separate incompatible products and use approved disposal services. Keep ignition sources and electrical equipment clear.

Do not block the water heater, panel, valves, door tracks, or normal exit route. Storage can make a small service task unsafe and delay emergency access. Use secure shelving suited to the load.

Look for water at thresholds and around appliances. Cardboard on the floor can hide leaks and attract pests. Keep records and valuables above predictable wet areas. Do not cut ventilation openings through the house wall to cool the garage.

Related guidance: source guide [05](#) (p. 116)

Driveways, patios, and walking surfaces

Water and small elevation changes affect daily safety.

Walk the routes to the mailbox, garage, trash area, and exterior doors. Look for raised edges, loose pavers, settlement, broken steps, slippery growth, and inadequate lighting. Prioritize routes people use at night or while carrying objects.

Photograph changing joints with a fixed reference. Flatwork can move independently of the house. A lifted driveway alone does not diagnose a foundation problem. A patio sloping toward a wall can increase moisture exposure even without large cracks.

Choose repairs by function

Grinding, lifting, replacement, joint work, and drainage correction address different conditions. Ask the provider to explain the cause, expected drainage after repair, transition heights, and limitations. Cosmetic resurfacing may conceal a crack without correcting movement.

Maintain intended movement joints with compatible materials and follow curing and traffic limits. Avoid aggressive cleaners and deicing products unsuitable for the surface. Pressure washing can damage unstable joints, soft mortar, and unknown coatings.

Inspect after freezes, tree work, excavation, and heavy equipment use. Maintain stable landings and secure handrails. Correct drainage without sending water toward neighboring property or public walks. Restrict access where unstable steps or significant displacement create a fall hazard.

- Record the location and date of a trip hazard before arranging repair.
- Recheck transitions and water flow after work.
- Retain the repair scope and warranty, including what movement is excluded.

Trees, fences, and retaining walls

Landscape changes can affect utilities, drainage, and structures.

Tree roots, canopy growth, and water demand belong in the site plan. Do not remove a large tree or cut major roots beside a foundation as a trial repair for cracking. Seek coordinated advice from an arborist and, when appropriate, a foundation engineer. Removal itself can change site and moisture conditions.

Observe from the ground for dead or hanging limbs, splits, new lean, soil lifting at the base, and contact with roofs or service lines. Do not work near power lines; contact the utility and a qualified tree provider.

Soil retained above your yard

A retaining wall holds back soil. Leaning, bulging, displaced blocks, failing drains, and soil loss deserve more than a cosmetic patch. Keep people away from unstable walls and obtain qualified evaluation. Do not excavate behind a wall or add a vehicle, soil pile, pool, or structure above it without design review.

Check fence posts, gates, latches, and fasteners. A repair beside a pool must preserve the complete barrier. Landscaping crews may leave gates open or move climbing aids against fences, so recheck afterward.

Before digging, use the applicable utility-locate process and account for private lines that may not be marked. Record major tree, grading, irrigation, and retaining-wall changes in the property history.

Irrigation through changing seasons

Observe each zone instead of trusting the controller display.

Match watering to plants, rain, soil conditions, and current local restrictions. The objective is healthy landscaping without runoff, chronic saturation, or repeated wetting of the house. No universal minutes-per-zone setting works for every yard.

Watch for broken heads, misting, blocked spray, and leakage after shutdown. Drip systems can leak unseen beneath mulch. Photograph controller settings before changes and label zones so a provider can find a problem.

Winterization and restart

Have an irrigation provider determine how the backflow assembly, exposed piping, valves, and pump should be protected. Compressed-air winterization needs system-specific procedures and is not a casual homeowner experiment. Rain and freeze controls work only when compatible, connected, and maintained.

At restart, inspect visible piping for freeze damage before unattended use. Watch every zone and verify the controls. A saturated patch, falling pressure, or increasing water bill needs investigation rather than merely a shorter timer setting.

Keep plants away from drains, weeps, vents, and equipment. Avoid spray that repeatedly wets masonry, siding, windows, or wood trim. Coordinate irrigation changes with the drainage and foundation moisture plan.

Record	Detail
Controller	Model, power source, program, seasonal changes
Zones	Location, spray or drip, shutoffs
Backflow	Type, test record, provider, required interval
Repair	Location, before/after photos, recheck

Related guidance: source guide [18](#) (p. 117), [22](#) (p. 117)

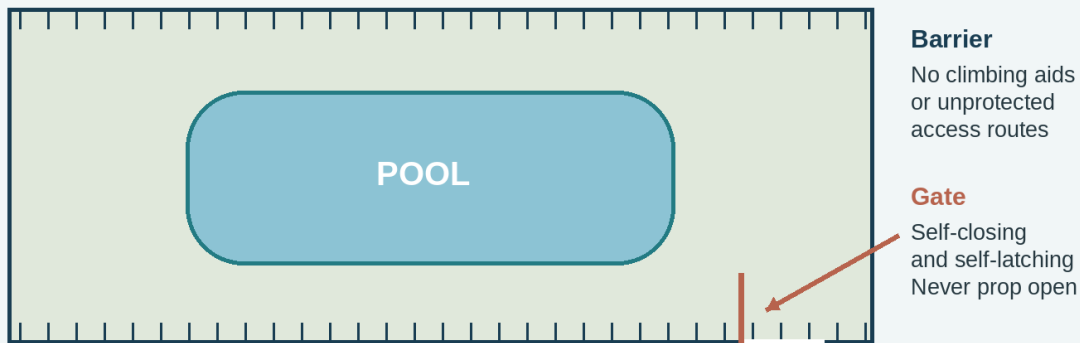
Pool and spa barriers

Use several layers of protection whenever water is present.

A barrier should prevent unsupervised access. An attentive adult actively supervising swimmers remains essential. Check gates for self-closing and self-latching operation, including from a partly open position. Keep furniture, planters, and equipment from becoming climbing aids.

Exact barrier requirements depend on the jurisdiction and installation. Have a qualified provider assess changes to fences, doors, covers, alarms, or adjacent landscaping. A floating cover is not a safety cover.

Pool safety: layers of protection work together



Active adult supervision + maintained barriers + rescue readiness

Concept only. Barrier design, covers, doors, alarms, and local requirements must be assessed for the actual home.

- Never prop open a pool gate. Recheck after deliveries, yard work, and storms.
- Maintain protective devices under their instructions; do not defeat an alarm to reduce nuisance.
- Designate an attentive water watcher, keep rescue equipment accessible, and learn CPR.
- Missing, loose, or damaged suction covers require closing the pool until professionally corrected.
- Stop swimming during thunder or lightning and follow official weather guidance.

Related guidance: source guide [15](#) (p. 117), [23](#) (p. 117)

376

pool and spa drowning deaths per year among U.S. children under 15 (2021–2023 average)

71%

of those deaths occurred at a residential location

88

child drownings in Texas in 2025; 49 occurred in pools, 36 of them backyard pools

Sources: CPSC, “Pool or Spa Submersion: Estimated Nonfatal Drowning Injuries and Reported Drownings, 2026 Report” (May 2026); Texas Department of Family and Protective Services, Child Drownings 2025 (pool counts tallied by Stonebriar from DFPS case tables).

Pool equipment, electrical safety, and leaks

Pressure, electricity, and suction require special caution.

From a dry, safe location, look for leaks, unusual pump noise, damaged conduit, rust, loose covers, and visibly disconnected bonding conductors. A qualified pool provider and electrician should assess protection and bonding. A running pump does not prove the installation is safe.

If anyone feels tingling in the water, move away from the source and get out, avoiding metal ladders if possible. Call 911 from safety. Shut off power only from a safe, dry location; do not enter potentially electrified water to rescue someone. Keep everyone out until professionals correct the cause and confirm safe reuse.

Stored pressure can injure

Do not loosen a filter clamp, open a pressurized housing, change valves while running, or defeat an interlock. Use a trained provider and the exact shutdown, pressure-relief, and restart procedure. A failed lid or clamp can cause serious injury.

Track pool level with rainfall, evaporation, use, and automatic-fill activity. Unexplained loss, wet soil, sinking deck areas, or continuous filling needs leak evaluation. Do not drain an in-ground pool without professional guidance; groundwater and soil conditions can create structural problems.

Keep a valve diagram, equipment details, and service history. Obtain a freeze and outage plan. Circulation alone does not protect every pipe or device during an extended freeze.

Related guidance: source guide [23](#) (p. 117)

Pool, spa, and fountain water care

Clear water does not prove safe water or equipment.

Maintain disinfectant, pH, filtration, and circulation under equipment and chemical labels and a qualified provider's program. Use the right test kit and record readings and additions. Product strength and water volume matter; avoid guessed doses.

Store chemicals in original labeled containers, dry and secure, with incompatible products separated. Never mix different pool chemicals or chlorine products, or combine them with acids or other cleaners. Follow the label's order of addition; do not improvise water-and-chemical mixing. Keep children and pets away during handling.

Spas and decorative water

Hot tubs need attention to temperature, sanitation, covers, and user health limitations. Follow public-health and manufacturer guidance and discuss medical restrictions with a clinician. Do not use a spa with failed protective devices or questionable water quality.

A tablet suitable for a swimming pool is not automatically suitable for a fountain, its pump or finish, or water accessible to pets. A stopped pump changes circulation and treatment. Repair the cause and use only approved products.

Suspend swimming when water is cloudy, sanitation is uncertain, or equipment has failed. If fumes cause irritation or a spill creates danger, leave the area and call emergency services from safety. Do not attempt to clean up an unknown chemical spill. Keep the service and chemical record together.

Related guidance: source guide [23](#) (p. 117), [24](#) (p. 117)



09

The maintenance year

A familiar monthly route and a seasonal calendar matched to North Texas weather turn good intentions into routine.

The monthly home walkthrough	82	Fall servicing and exterior closeout	87
Maintenance intervals at a glance	83	Checks after storms, outages, and leaks	88
Winter and freeze readiness	84	The annual whole-home review	88
Spring rain and storm preparation	85	Hiring, replacement, and repair decisions	89
Summer heat and soil moisture	86	Seasonal checklists	93

The monthly home walkthrough

A familiar route makes new conditions easier to notice.

Choose a regular date and use the same route. Carry a flashlight, phone, and checklist. This is a screen for change, not a complete technical inspection. Take longer when something differs and use the appropriate provider for diagnosis.

Look before touching. Record the exact room, wall, fixture, or equipment involved. Take one wide photograph for context and one closer photograph for detail. Keep a previous image available for comparison.

Use Routine maintenance, Monitor, Professional evaluation, or Urgent service for findings. An emergency takes priority over the log. Assign a responsible person and a follow-up date; do not carry unresolved safety issues from month to month.

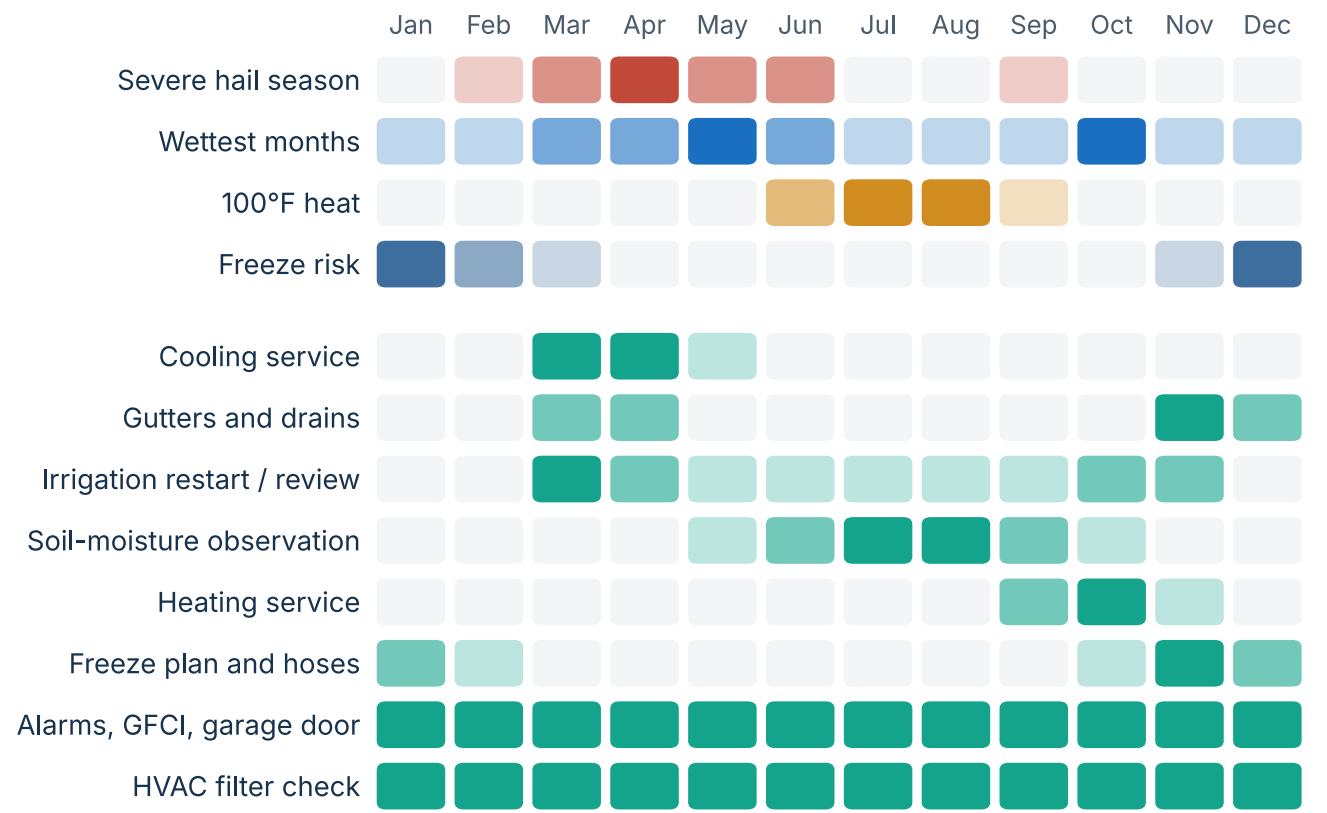
- Record the walkthrough in the [Monthly walkthrough and filter log](#) (page 107) and device tests in the [Safety-device test record](#) (page 108).
- Mark unsafe or inaccessible areas “not checked,” with an action to resolve access.

Area	Monthly observation
Kitchen and baths	Drips, slow drains, running toilets, cabinet swelling, wet-area joints
HVAC	Filter condition, comfort, visible leakage, blocked grilles
Ceilings and walls	Stains, soft finishes, recurring cracks, odors
Electrical	Damaged cords/covers, repeated trips, clear panel access
Life safety	Alarm and protective-device tests under their manuals
Exterior	Ground-level roofline, walls, plants, runoff, visible plumbing
Garage and laundry	Door safety, washer connections, dryer exhaust, storage

Maintenance intervals at a glance

Starting intervals for a typical home, adjusted to the actual equipment.

The North Texas maintenance year at a glance



Top four rows: local conditions from NOAA data (SPC hail reports 2005–2024; NCEI 1991–2020 normals; median first freeze November 24, last freeze March 8). Darker cells mean more frequent or more intense. Remaining rows: starting schedules from this handbook. Adjust every task to your equipment and manuals.

Use these intervals to start a maintenance calendar. They are general planning guidance, not universal manufacturer requirements or a guarantee of safe operation. Follow the model’s manual, service findings, water conditions, local requirements, and any shorter required interval. A warning sign needs action now, even when the next service is months away.

For rented, shared, or association-maintained property, establish who is responsible before assuming someone else handles the task. Keep the applicable manuals with the home record.

Task	Starting interval and adjustment
HVAC filters	Check monthly; many disposable types need replacement every 1–3 months. Use the specified filter and interval; replace sooner when dirty.
HVAC equipment	Professional cooling service each spring and heating service each fall. Include airflow, safety controls, and condensate drainage.
Dryer	Lint screen every load. Full exhaust-path cleaning at least annually; sooner with heavy use or reduced airflow. Ventless models follow their manual.

Task	Starting interval and adjustment
Gutters and drains	Check and arrange needed cleaning in spring and fall, after heavy leaf drop, and after storms. More often under trees.
Smoke and CO alarms	Test monthly. Smoke alarms: generally replace at 10 years from manufacture. CO alarm life and all battery intervals are model-specific.
GFCI and AFCI	Test GFCIs monthly; follow AFCI labeling and manual, commonly monthly. Plan power interruptions and record failed tests.
Garage door	Monthly manufacturer-specified photoelectric and contact-reversal tests. Do not test a damaged or unbalanced door.

Water and exterior service intervals

Task	Starting interval and adjustment
Plumbing	Monthly cabinet, fixture, toilet, hose, and visible leak checks; recheck after installation or service. Refill rarely used traps monthly if suitable.
Water heaters	Annual professional review. Many tank models use annual flushing and anode review; tankless descaling depends on the manual and water quality.
Irrigation	Watch each zone at seasonal changes and check monthly during use. Inspect after repairs; observe soil weekly during prolonged drought.
Exterior envelope	Ground-level review each spring and fall and after storms. Check sealants, flashing clues, cladding, windows, and walking surfaces.
Termite/WDI	Monthly homeowner observations; annual professional inspection is a planning baseline, adjusted to risk, findings, and treatment contract.
Fireplace and chimney	Professional inspection annually; clean as needed and do not reuse after a suspected chimney fire until evaluated.
Well and septic	Well water: annual basic tests plus risk-specific advice. Typical septic inspection at least every 3 years; pumping often every 3–5 years. Alternative systems may need more frequent service.
Pool and spa	Check access barriers before use; water testing, circulation, filters, and chemicals follow the equipment, label, and provider program.

Related guidance: source guide [01](#) (p. 116), [04](#) (p. 116), [08](#) (p. 116), [10](#) (p. 116), [18](#) (p. 117), [20](#) (p. 117)

Winter and freeze readiness

Prepare before temperatures fall and inspect after thawing.

Identify the homeowner water shutoff, protect vulnerable piping, disconnect garden hoses, and follow local utility and equipment freeze instructions. Keep heat operating when away. If a plan involves shutting off water, have a plumber account for water heaters, fire sprinklers, pumps, and dependent equipment.

Where recommended, open sink cabinets to admit indoor warmth while keeping cleaners away from children and pets. Follow current utility advice about dripping faucets; restrictions and conditions vary. Dripping one fixture does not protect every pipe.

After temperatures rise

Check exterior faucets, garages, cabinets, ceilings, and equipment visible from safe access. A frozen pipe may not visibly leak until it thaws. If flow stops or freezing is suspected, follow local shutoff guidance and call a plumber. Do not use flame or uncontrolled heat.

Review safe portable-heater use and confirm alarms work. Never use grills or ovens for indoor heating. Have generator location and transfer arrangements established before the outage, using [Generators, solar, and stored power](#) (page 61).

Ask pool and irrigation providers for a written outage plan. Keep emergency contacts printed, charged lighting available, and household needs considered. Photograph damage from safety and retain repair records.

Related guidance: source guide [06](#) (p. 116), [18](#) (p. 117)

Spring rain and storm preparation

Use rainfall to learn how water actually moves.

Before the wet season, inspect roof edges, gutters, downspouts, visible drains, and discharge points from the ground. Arrange safe professional cleaning and repairs where needed. A clean gutter still fails if its outlet sends water back toward the house.

During ordinary rain, observe runoff from a sheltered, safe position. Note ponding, splashback, overflowing gutters, and water reaching walls or thresholds. Do not enter flooded areas or investigate outdoors during thunder and lightning.

Bring systems into service

Arrange cooling service before peak demand. Check filters, condensate arrangements, and the last unresolved comfort issue. Restart irrigation by observing each zone and checking for freeze damage.

Look for new roof damage, loose trim, pest activity, and vegetation contacting the building. Do not seal active weeps or ventilation openings while freshening the exterior. Have termites or other suspected wood-destroying organisms assessed by an appropriate provider.

Review the storm plan, alerts, shelter location, and emergency contacts. After a significant event, document changes from the ground and follow [After the event: document and close the loop](#) (page 17). Do not sign a repair contract solely because someone arrives after the storm; verify the provider and scope.

Related guidance: source guide [08](#) (p. 116), [21](#) (p. 117)

Summer heat and soil moisture

Consistent observation matters more than a fixed watering recipe.

North Texas heat can expose weaknesses in cooling, irrigation, drainage, and exterior finishes. Check filters more closely during heavy operation and watch for condensate problems. Do not force an iced or leaking air conditioner to keep running.

Track landscape condition and soil moisture patterns without assuming that a dry surface proves deeper conditions. Clay can shrink as moisture declines and swell as it rises. Changes are not uniform across a site. No watering schedule can guarantee foundation performance.

Avoid abrupt or excessive watering beside the house. Keep irrigation consistent with plants, drainage, restrictions, and a qualified site-specific plan. Repair leaks and stop chronic saturation. Record major tree and watering changes with movement observations.

The maintenance year: match the task to the conditions

WINTER

Freeze plan
Alarms and safe heat
Post-thaw leak checks

SPRING

Rain and runoff
Cooling service
Irrigation restart

SUMMER

Filters and condensate
Soil-moisture patterns
Pool barriers

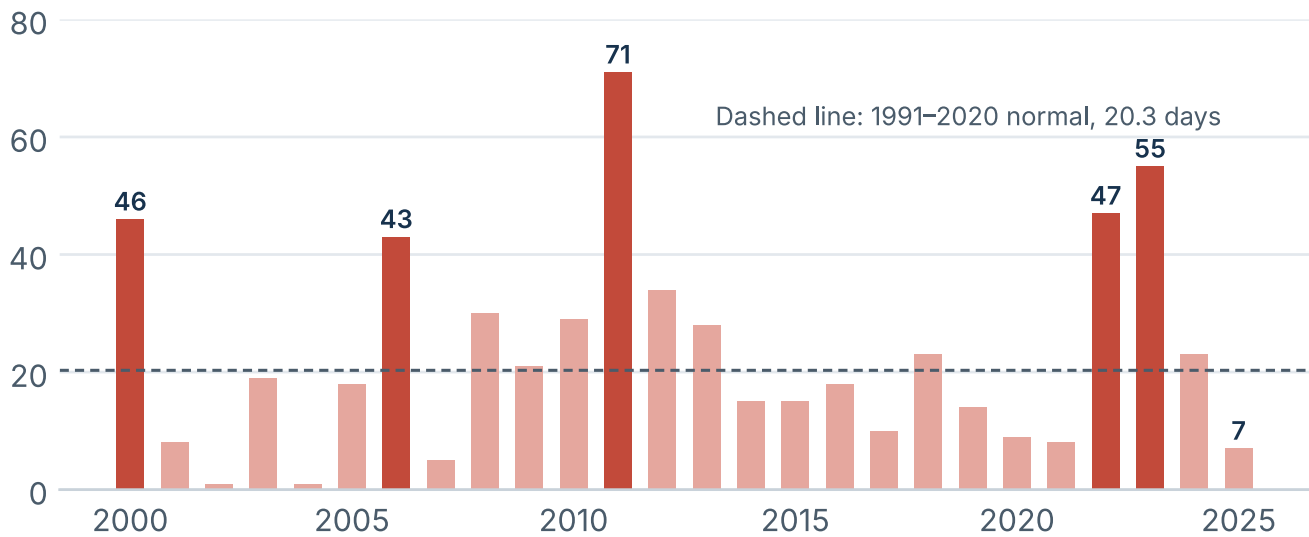
FALL

Heating service
Exterior closeout
Winter preparation

Monthly observations continue all year. Storms, leaks, and equipment faults create additional checks.

- Inspect pool barriers and door latches frequently during heavy use.
- Look for heat-damaged sealants, loose finishes, and vegetation contact.
- Plan vacations with leak response, cooling, and emergency access in mind.
- Use dated photographs to compare cracks and doors; seek evaluation for significant or progressive change.

Related guidance: source guide [19](#) (p. 117)

Days at or above 100°F at DFW Airport, 2000–2025

Source: Stonebriar count from NOAA NCEI Global Historical Climatology Network daily data, station USW00003927. The 71 days in 2011 is the official record (NWS Fort Worth). Dry, hot summers such as 2011, 2022, and 2023 are when perimeter soil moisture and condensate drainage need the closest attention.

Fall servicing and exterior closeout

Finish weather-sensitive work before winter access becomes difficult.

Arrange professional heating service before sustained cold. Review furnace or heat-pump instructions, alarms, filters, and unresolved equipment faults. Confirm the provider has checked the actual system rather than completing a generic seasonal invoice.

Inspect roof runoff, visible flashing, exterior joints, and vulnerable wood finishes from the ground. Arrange work while materials can cure under their temperature and weather requirements. Do not coat or seal intended weeps, vents, or drainage openings.

Prepare the site

Adjust irrigation to rainfall, plant needs, and restrictions. Obtain the winter plan for exposed backflow assemblies, pool equipment, fountains, and vulnerable piping. Disconnect garden hoses as appropriate and verify known shutoffs remain accessible.

Check weatherstripping, door operation, exterior lighting, handrails, and normal walking routes. A sticking door may need adjustment, but document any broader movement pattern before treating it as an isolated hardware problem.

Close the annual record: unresolved issues, completed repairs, warranties, service contacts, and budget priorities. Photograph significant repairs after completion and schedule a recheck after rain or normal use. A paid invoice is useful; evidence that the repair performs as intended is better.

Related guidance: source guide [08](#) (p. 116), [18](#) (p. 117)

Checks after storms, outages, and leaks

Use the event to focus the inspection without entering danger.

Wait until the site is safe. Downed lines, unstable trees, floodwater, damaged roofs, and wet electrical equipment are reasons to stay away and call the responsible responders or utility. Do not let documentation delay evacuation or source control.

Record the date, weather, rooms affected, and immediate actions. Photograph from safe locations before cleanup when feasible. Keep receipts and provider reports. Contact the insurer promptly under the policy's reporting requirements, without assuming every event or repair is covered.

Look beyond the obvious symptom

After wind or hail, arrange roof evaluation if damage is suspected. After an outage, check equipment status and follow restart instructions. After a leak, verify both source repair and drying. After excavation or heavy work nearby, recheck drainage, flatwork, and visible movement.

An apparently normal exterior does not rule out concealed water entry. New stains, odors, trips, vibration, or operational changes deserve follow-up. Mark inaccessible areas clearly.

Set a recheck after the next ordinary rain or operating cycle. A dry-day check may not reproduce the cause. Keep the issue open until the explanation, correction, and reasonable verification are complete.

Related guidance: source guide [11](#) (p. 116), [21](#) (p. 117)

The annual whole-home review

Bring observations, service records, and spending decisions together.

Set aside time each year to walk the property and review the records. Use the same route and photographs so changing conditions stand out. Revisit every item previously marked Monitor or Evaluate. Decide whether its condition, urgency, or responsible provider has changed.

Review plumbing and water-heating records, HVAC service, safety tests, roof and drainage observations, exterior finishes, garage protection, and any pool or specialty-system plan. A system not used frequently still needs attention; inactivity is not proof of good condition.

Prioritize by consequence

First address immediate safety hazards and active water damage. Next handle conditions likely to worsen, then reliability, comfort, efficiency, and appearance. Coordinate related work: a roof, drainage, and interior stain may be parts of the same problem.

Update contacts, equipment models, filter sizes, manuals, warranties, and emergency access instructions. Review ownership or association responsibilities and upcoming warranty dates.

A periodic professional maintenance inspection can help identify issues beyond the homeowner's routine observations. Describe unresolved history and provide earlier reports. It remains a visual assessment with limitations, not a guarantee against failure.

Finish the [Annual condition and priority review](#) (page 113) with priorities, budgets, provider assignments, and dates. Put the next review on the calendar.

Hiring, replacement, and repair decisions

Buy a clear scope and a useful explanation.

Ask a provider to explain the observed condition, likely cause, proposed correction, alternatives, and limits. Separate urgent safety work from optional upgrades. Where appropriate, obtain another qualified opinion before a major commitment, especially if recommendations conflict.

Verify relevant licensing, insurance, permit responsibilities, and references for the work. A general promise to “bring everything to code” is less useful than identifying the applicable work, inspection, and acceptance process.

Compare complete scopes

Compare materials, equipment models, preparation, access, protection of finishes, disposal, permits, testing, cleanup, schedule, payment terms, and warranties. A lower price may omit work needed for a complete result. Do not assume a warranty covers unrelated movement, water entry, maintenance, or consequential damage.

For foundation concerns, ask for site-specific evidence and the limitations of measurements or proposed repairs. For HVAC, include ducts and loads. For roof work, include flashing and drainage. For plumbing, include access and finish restoration.

Retain before-and-after photographs and closeout evidence. Ask how to verify performance after rain, seasonal change, or normal use. Record warranty transfer rules and service obligations. Keep a reserve plan based on actual condition and professional advice rather than treating generic life-expectancy tables as expiration dates.

Choose the right Texas provider

Verify the license category and current status for the actual work, then confirm insurance, scope, permit responsibility, and the person or business named on the proposal. A state license does not replace local permits or a written contract. The local building or permitting authority determines applicable permits and inspections.

TDLR. Texas Department of Licensing and Regulation licenses electricians, electrical contractors, and air-conditioning and refrigeration contractors. It also regulates non-exempt mold assessment and remediation.

[Verify TDLR credentials](#)

TSBPE. Texas State Board of Plumbing Examiners licenses plumbers. Check the plumbing company's Responsible Master Plumber and applicable insurance information.

[Verify TSBPE credentials](#)

TDA. Texas Department of Agriculture Structural Pest Control Service oversees structural pest-control licensing. Verify the appropriate termite category for WDI work.

[TDA licensing guidance](#)

TCEQ. Texas Commission on Environmental Quality licenses landscape irrigation professionals and backflow prevention assembly testers. These are separate qualifications.

[TCEQ licensing guidance](#)

TBPELS. Texas Board of Professional Engineers and Land Surveyors provides engineer and engineering-firm verification. Use an appropriate Texas professional engineer for structural engineering opinions.

[Verify TBPELS credentials](#)

TREC. Texas Real Estate Commission licenses real-estate inspectors. A home inspection is a limited visual assessment; the license is distinct from trade, engineering, or WDI credentials.

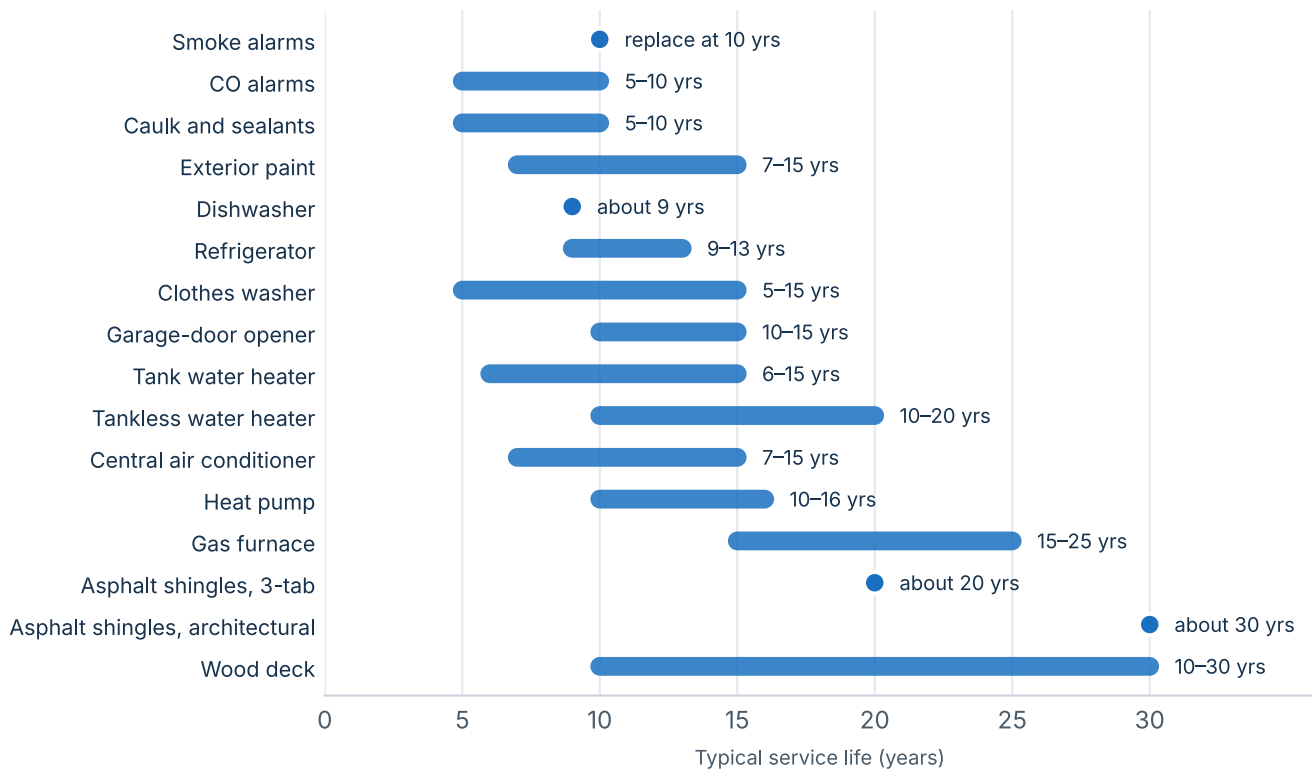
[Verify TREC credentials](#)

For roofing and general repair work, verify insurance, references, local registration when required, and the written scope. Do not assume there is one statewide general-contractor license covering every repair. For specialized systems, ask the relevant authority which credential applies.

NORTH TEXAS DATA**Planning ranges for common components**

Life-expectancy tables are useful for building a reserve fund, not for deciding when something has failed. The ranges below come from national sources that assume normal installation and regular maintenance. Equipment can fail early or last much longer, and North Texas heat, hail, and water quality all influence the result. Use actual condition and professional findings to set priorities.

Typical service-life ranges used for reserve planning



Sources: InterNACHI, "Standard Estimated Life Expectancy Chart for Homes"; NAHB/Bank of America Home Equity, "Study of Life Expectancy of Home Components" (2007); DOE Energy Saver (2022); USFA (smoke alarms: replace 10 years from manufacture); Kidde (CO alarm life by model). Where sources differ, the bar spans both.

NORTH TEXAS DATA

Two Texas licensing facts many homeowners miss

Home warranties are regulated by TDLR. Since September 1, 2021, residential service companies (the businesses that sell home warranty contracts) have been licensed by the Texas Department of Licensing and Regulation under Occupations Code Chapter 1304, not by TREC.

Texas has no state roofing license. TDLR does not license roofing contractors. The Roofing Contractors Association of Texas (RCAT) offers a voluntary private credential. Verify insurance, references, local registration, and a written scope for roof work.

Sources: TDLR, "Residential Service Company Transfer"; TREC, "Residential Service Companies"; RCAT, "Licensing."

Work	Where to verify
Home inspector	TREC license search: trec.texas.gov/license-search
Electrician, A/C and refrigeration, home warranty company	TDLR license search: tdlr.texas.gov/LicenseSearch
Plumber	TSBPE: tsbpe.texas.gov/find-a-plumber
Termite and pest control	TDA Structural Pest Control Service license lists

Work	Where to verify
Irrigation	TCEQ licensing search: www2.tceq.texas.gov/lic_dpa
Structural engineer	TBPELS roster: pels.texas.gov/roster/pesearch.html

Spring maintenance checklist

Storms, runoff, and cooling readiness

Year: _____ Completed by: _____

Mark each box when complete. Write N/A for absent systems; assign a follow-up for items not checked.
Stop for unsafe conditions.

- ☐ Arrange professional cooling service and review filters and condensate drainage.
- ☐ Check gutters, downspouts, drains, and outlets; arrange safe cleaning.
- ☐ Observe drainage after ordinary rain; record ponding and erosion.
- ☐ Walk the roofline from the ground for storm damage and loose materials.
- ☐ Watch every irrigation zone at restart and check for freeze damage.
- ☐ Check weeps, wall clearances, pest evidence, and vegetation contact.
- ☐ Review termite/WDI service and any treatment warranty inspection date.
- ☐ Test smoke and CO alarms and prescribed protective devices.
- ☐ Check exterior doors, weatherstripping, steps, handrails, and lighting.
- ☐ Review storm shelter, utility contacts, and the household escape plan.

Follow-up task / provider / date

Summer maintenance checklist

Heat, water control, and safe outdoor use

Year: _____ Completed by: _____

Mark each box when complete. Write N/A for absent systems; assign a follow-up for items not checked.
Stop for unsafe conditions.

- ☐ Check HVAC filters monthly and sooner if heavy dust or use loads them.
- ☐ Look for condensate leaks, icing, weak airflow, and comfort changes.
- ☐ Compare perimeter moisture weekly during prolonged heat and drought.
- ☐ Adjust irrigation to rain and restrictions; stop runoff and saturation.
- ☐ Keep spray off walls and equipment; repair broken heads and hidden leaks.
- ☐ Check pool barriers before use and keep gates self-closing and latching.
- ☐ Maintain pool/spa testing and chemicals under labels and provider guidance.
- ☐ Check plumbing cabinets, appliance hoses, and visible water-heater areas.
- ☐ Plan vacation leak response, cooling, access, and emergency contacts.
- ☐ Record changing cracks or doors; arrange evaluation for progressive change.

Follow-up task / provider / date

Fall maintenance checklist

Heating service and preparation before the first freeze

Year: _____ Completed by: _____

Mark each box when complete. Write N/A for absent systems; assign a follow-up for items not checked.
Stop for unsafe conditions.

- ☐ Arrange professional heating service and resolve safety or venting concerns.
- ☐ Have fireplaces and chimneys inspected before seasonal use.
- ☐ Test smoke and CO alarms; check manufacture and replacement dates.
- ☐ Clean gutters after leaf drop and keep drain and overflow paths clear.
- ☐ Check exterior joints, weatherstripping, doors, stairs, and lighting.
- ☐ Disconnect hoses before freezing weather and protect vulnerable faucets.
- ☐ Obtain freeze and outage plans for irrigation, pools, and tankless heaters.
- ☐ Adjust watering to cooler weather and rainfall; avoid a fixed summer program.
- ☐ Review dryer duct cleaning and annual water-heater service records.
- ☐ Update repair priorities, budgets, warranties, and service contacts.

Follow-up task / provider / date

Winter maintenance checklist

Freeze readiness and checks after thawing

Year: _____ Completed by: _____

Mark each box when complete. Write N/A for absent systems; assign a follow-up for items not checked.
Stop for unsafe conditions.

- ☐ Keep the home heated and follow the property-specific freeze plan.
- ☐ Keep the homeowner water shutoff labeled and safely accessible.
- ☐ Confirm hose removal, faucet protection, and exposed-pipe protection.
- ☐ Follow utility advice on cabinets and faucet dripping; protect children from cleaners.
- ☐ Keep portable heaters clear of combustibles and use approved wall outlets.
- ☐ Never heat with an oven or grill; operate portable generators outdoors at least 20 feet from the home.
- ☐ After thawing, check faucets, garages, cabinets, ceilings, and equipment for leaks.
- ☐ Watch heat-pump behavior; do not chip ice or bypass protective controls.
- ☐ Keep walkways and exits usable; inspect for ice and trip hazards.
- ☐ Record freeze damage and arrange source repair and drying before refinishing.

Follow-up task / provider / date

1-Year Builder Warranty Inspection



10

Warranties, claims, and records

New in this edition. Builder warranties, home warranties, manufacturer warranties, and insurance each reward good records. This chapter explains how they differ in Texas and which deadlines matter.

Four kinds of protection, four rulebooks	98	Home warranties are service contracts	100
The new-home warranty timeline	98	Insurance claims after storms and leaks	101
Register equipment while the clock is running	99	Records that support every claim	101
If a builder defect is disputed	100		

Four kinds of protection, four rulebooks

Builder warranties, home warranties, manufacturer warranties, and insurance cover different events.

Homeowners often use the word “warranty” for any promise that someone else will pay for a repair. In practice, four different arrangements may apply to the same house, each with its own coverage, deadlines, exclusions, and regulator. Knowing which one applies before a problem occurs saves time and prevents missed deadlines.

All four have one thing in common: they reward good records. Dated photographs, service invoices, equipment registrations, and the logs in this handbook help show that a condition is sudden rather than long-standing, that required maintenance was performed, and that notice was given on time.

Protection	What it generally covers	Common limits	Records that help
Builder warranty (new homes)	Workmanship and materials, then systems, then major structural defects, on a published schedule	Excludes appliances covered by their makers, minor cracks, and items damaged by homeowner neglect; written notice usually required	Closing documents, warranty booklet, dated photos, written repair requests
Home warranty (residential service contract)	Repair or replacement of covered systems and appliances that fail from normal wear and tear	Excludes perils covered by insurance; contracts set exclusions, payout caps, and service fees	Contract, equipment ages, service history, claim numbers
Manufacturer warranty	Parts, and sometimes labor, for specific equipment	Registration deadlines; installation and maintenance conditions; water-quality limits for some heaters	Registration confirmation, installer invoice, maintenance records, water test results
Homeowners insurance	Sudden, accidental damage from covered perils such as wind, hail, fire, and some water events	Commonly excludes flood, continuous leaks, wear and tear, earth movement, and most mold	Before-and-after photos, mitigation receipts, prompt notice, inspection reports

Sources: Federal Trade Commission, “Warranties for New Homes” (updated 2026) and “So what’s the deal with home warranties?” (2023); TREC, “Residential Service Companies”; Texas Department of Insurance, Home Insurance Guide (updated June 2026).

The new-home warranty timeline

The most valuable deadlines arrive in the first year, when nothing seems wrong.

The Federal Trade Commission describes the typical new-home warranty structure as one year for workmanship and materials, generally two years for heating and cooling, plumbing, and electrical systems, and, from some builders, ten years for major structural defects. Your own warranty booklet controls the actual terms. The FTC recommends putting repair requests in writing and sending them by certified mail with a return receipt.

Closing day	Collect the warranty booklet, equipment manuals, and model and serial numbers. Start the photo record.
Within 60 days	Register HVAC and water-heating equipment. Lennox counts its 60 days from the closing date for a new home.
Month 10–11	Schedule a one-year builder warranty inspection so findings reach the builder before the workmanship period ends.
Year 1	Typical end of workmanship and materials coverage.
Year 2	Typical end of systems coverage: HVAC, plumbing, and electrical.
Year 10	Typical end of major structural defect coverage, where offered.

Sources: FTC, "Warranties for New Homes"; Lennox, equipment registration FAQ. Typical schedules vary by builder and third-party warranty company.



STONEBRIAR SERVICE

One-year builder warranty inspections

Stonebriar Property Inspections performs one-year (11th-month) builder warranty inspections so new-home owners can submit a documented list of concerns to the builder before the workmanship period ends.

214-923-7304 · stonebriarpropertyinspections.com

Register equipment while the clock is running

A missed registration can shorten a parts warranty by half.

Major HVAC manufacturers offer longer parts coverage only when equipment is registered within a set window after installation. Unregistered equipment typically falls back to a shorter base warranty. Ask the installer whether registration was completed, and keep the confirmation with the equipment inventory.

Manufacturer	Registration window	If not registered
Carrier	90 days from installation	Standard 5-year parts warranty, no labor (except where state law prohibits a registration requirement)
Trane	60 days	Base limited warranty, typically 5 years, instead of the registered limited warranty, typically 10 years
Lennox	60 days from installation; from closing for a new home	Base limited warranty terms

Water heaters carry their own conditions. As one example, Rheem's residential tankless warranty excludes failures caused by installation that does not follow building codes, by failure to operate and maintain the unit according to the manufacturer's instructions, and by lime, mineral buildup, or scale, and it sets limits on water hardness. In hard-water areas, a dated descaling record and a water test can matter as much as the receipt.

Sources: Carrier, Trane, and Lennox homeowner warranty and registration pages (accessed October 2026); Rheem residential tankless water heater limited warranty. Terms change; read the warranty for your model.

If a builder defect is disputed

Texas law sets a notice-and-repair process before a construction-defect lawsuit.

The Texas Residential Construction Liability Act (Texas Property Code Chapter 27) requires a homeowner to give the contractor written notice of a construction defect at least 60 days before filing suit. The notice is sent by certified mail, return receipt requested, describes the defects in reasonable detail, and includes available evidence such as inspection reports and photographs. The contractor then has the opportunity to inspect and to make a written offer of repair or settlement.

-  **Day 0** Homeowner sends written notice with supporting evidence.
-  **By day 35** Contractor may request to inspect the claimed defects.
-  **By day 60** Contractor may make a written offer to repair or settle.
-  **Within 25 days** Homeowner responds; an unreasonable offer must be explained in writing.

The statute has further provisions, including limits on recovery when a reasonable offer is rejected. This summary is general information, not legal advice. Consult a Texas attorney about a specific dispute, and keep the inspection reports and dated photographs that document the condition.

Source: Texas Property Code §27.004. Verify current text at statutes.capitol.texas.gov.

Home warranties are service contracts

Read the exclusions, caps, and service fees before relying on one.

A home warranty, called a residential service contract in Texas law, generally pays for repair or replacement of covered systems and appliances that fail from normal wear and tear. It is not insurance: TREC notes that these contracts exclude perils that homeowners insurance covers, such as fire, theft, and rain damage, and that buying one is not required to purchase a home. Residential service companies are licensed by TDLR.

The Federal Trade Commission advises reading the contract for excluded systems and conditions, payout limits, per-visit service fees or deductibles, and cancellation terms. Contracts commonly address pre-existing conditions and failures attributed to lack of maintenance, so check your contract's definitions. Maintenance records, filter logs, and service invoices are the homeowner's best response to a denial based on neglect.

Sources: TREC, "Residential Service Companies"; TDLR; FTC consumer alert, February 24, 2023.

Insurance claims after storms and leaks

Protect the property, document the damage, and notify the insurer promptly.

The Texas Department of Insurance advises homeowners to notify the insurer promptly, photograph or video the damage before repairs, make only temporary repairs (such as a tarp or boarded windows) to prevent further damage, keep all receipts, and be present for the adjuster’s inspection. Permanent repairs made before the adjuster’s visit can lead to a denial. Claim-filing deadlines are set by each policy; some allow one year, and Texas Windstorm Insurance Association (TWIA) policies require filing within one year of the damage.

TDI also lists losses that standard policies commonly exclude: flood, continuous water leaks, mold (except when removal is needed to repair a covered loss), termites and other pests, wear and tear, earth movement, and damage during extended vacancy. In TDI’s words, insurers “won’t pay for damages that happen over time, like rotted boards, cracking window seals, or worn roofs.” That is the practical reason this handbook stresses monthly observation and dated records: they help distinguish a sudden covered event from slow deterioration.

Texas prompt-payment step	Typical deadline for the insurer
Acknowledge the claim and begin investigation	15 days after notice
Accept or deny the claim	15 business days after receiving all requested information; up to 45 days if the insurer explains the delay
Pay an accepted claim	5 business days after agreeing to pay

Sources: Texas Department of Insurance, Home Insurance Guide (updated June 1, 2026) and “What your home policy won’t cover” (April 2025); Texas Insurance Code Chapter 542. TWIA and surplus-lines insurers follow different deadlines. Before filing suit over a weather-related claim, Texas Insurance Code Chapter 542A requires written notice at least 61 days in advance.

Records that support every claim

The worksheets that follow are designed to answer the questions adjusters and warranty companies ask.

Question you may be asked	Record that answers it
When did the damage first appear?	Service, repair, and water-event record (page 109); dated photos
Was the equipment maintained?	Monthly walkthrough and filter log (page 107); service invoices
How old is the system, and was it registered?	Equipment inventory (page 106); registration confirmations
What did the roof or wall look like before the storm?	Exterior annual photo route (page 36)
Has the crack or door problem changed?	Drainage and movement observations (page 110)



11

Homeowner records

Printable worksheets for the information you need during an emergency, a claim, a repair, or a sale.

Home profile and emergency locations	103	Drainage and movement observations	110
Emergency and service contacts	104	Photographs, manuals, and warranty files	111
Equipment inventory	106	Service providers and reserve planning	112
Monthly walkthrough and filter log	107	Annual condition and priority review	113
Safety-device test record	108	Repair closeout and household handoff	114
Service, repair, and water-event record	109		

Home profile and emergency locations

Complete this page before a problem makes the information urgent.

Record locations clearly enough for another household member to find them. Photograph the correct controls; never operate unfamiliar equipment just to complete this form.

Keep a printed copy accessible. Do not record security codes on copies shared with contractors.

Item	Home information
Property address	
Owner / resident	
Year built / move-in	
Water provider	
Homeowner water shutoff	
Electric provider / disconnect	
Gas provider / meter location	
HVAC systems and filters	
Water heater / fuel	
Irrigation / pool / well / septic	
Shared responsibilities	
Emergency access contact	
Profile reviewed / date	

Emergency and service contacts

Print the information and make sure the household can find it.

For immediate danger, call 911 from safety. Verify utility emergency numbers and each provider's after-hours arrangements.

Keep a separate phone or paper copy. Update contacts at least annually and after changes.

Contact	Name / number / notes
Emergency responders	911; call from safety
Electric utility emergency	
Gas utility emergency	
Water utility / emergency	
Plumber / after hours	
HVAC / after hours	
Electrician	
Roofer / leak response	
Garage-door provider	
Pool / irrigation provider	
Insurance / policy reference	
Neighbor / access contact	
Stonebriar	214-923-7304 • keith@spi-guy.com
Last verified date	

NORTH TEXAS DATA

Common North Texas utility emergency contacts

Confirm your own providers on your bills. Some Collin and Denton County addresses are served by electric cooperatives or municipal utilities rather than Oncor.

Oncor (electric delivery outages)	888-313-4747; enrolled MyOncor Alerts customers can text OUT to 66267
Atmos Energy gas emergency (24 hours)	866-322-8667, and 911. Leave the area first.
Texas811 (call before you dig)	811, at least 48 hours before digging, not counting weekends and holidays

Sources: Oncor; Atmos Energy gas safety page; Railroad Commission of Texas.

Equipment inventory

Record exact model information before labels fade or become inaccessible.

Copy exact model and serial numbers from safe access or ask the provider. Attach label photos and manuals.

Use additional copies for more systems. Mark installation dates as verified or estimated.

Equipment / location	Model / serial / installed	Manual / provider / notes
Cooling / heating 1		
Cooling / heating 2		
Filter locations / sizes		
Water heater		
Water treatment		
Main / other panels		
Garage-door opener		
Irrigation controller		
Pool / spa equipment		
Other system		

Monthly walkthrough and filter log

Record observations and follow-up, not just a check mark.

Record the filter check, replacement or cleaning, and new conditions. Describe follow-up and mark inaccessible areas not checked.

Repeat for each HVAC system or year. Urgent problems require action now.

- Year: _____ System / filter size: _____

Month / date	Walkthrough / filter result	Action / responsible person / due
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		

Safety-device test record

Use the exact device instructions and record failed or incomplete tests.

Use each device’s manual. Record Pass, Fail, or Not completed, and assign a correction for every failed or incomplete test.

Plan power interruptions and restore affected equipment. Keep manufacture and replacement dates with the manual.

Device / location	Date / test / result	Correction / next test

Service, repair, and water-event record

Keep the cause, correction, and verification together.

Use for a service visit or water event. Attach invoices, permits, and photographs. Record uncertainty and unresolved work.

For water events, document the source and repair plus drying or material removal. Painting a stain is not source correction.

Field	Record
Date / location / equipment	
Symptom and conditions	
Immediate action	
Provider / contact / invoice	
Diagnosis and limitations	
Repair / parts / scope	
Water / drying evidence	
Verification method and result	
Permit / inspection record	
Warranty / maintenance terms	
Remaining issue / responsible party	
Recheck date and outcome	

Drainage and movement observations

Compare the same location under recorded conditions.

Record the same location and photo position. A log supports evaluation; it does not establish structural adequacy.

Include weather, watering, leaks, tree work, and excavation. Retain professional surveys with their methods and limitations.

Date / exact location	Observation / photo ID	Weather / changes / follow-up

Photographs, manuals, and warranty files

A simple naming system makes the record usable years later.

Use date, system, location, and subject in filenames. Keep original wide and close views together.

Keep invoices and warranties with the system. Back up records and preserve registration, transfer, and maintenance terms.

Category	Folder / document / date
Purchase inspection and disclosures	
Roof and exterior	
Foundation / drainage / surveys	
Plumbing and water heating	
Electrical and safety	
HVAC and ventilation	
Pool / irrigation / specialty	
Permits and final inspections	
Warranties / insurance	
Backup location / last checked	

Service providers and reserve planning

Use actual condition and written scopes to plan spending.

Verify contact details, qualifications, and scope. Carry unresolved recommendations into the next visit.

Update reserve figures from current estimates and condition. Prioritize safety and water damage; these are planning amounts, not guaranteed costs.

- Reserve review date: _____ Planned annual contribution: _____

System / provider	Contact / last service	Next action / due

Reserve projects

Planned project	Estimate / date / source	Priority / target year

Annual condition and priority review

Turn a year of observations into a short action list.

Review monthly, safety, repair, and movement records. Carry forward unresolved items and the evidence needed to close them.

Assign a provider and due date. Use emergency action immediately when needed; never wait for the annual review.

Review field	Annual record
Year / reviewer	
Immediate safety / water concerns	
Roof / exterior / drainage	
Foundation / movement history	
Plumbing / water heating	
Electrical / alarms / safety tests	
HVAC / air / moisture	
Garage / landscape / pool	
Repairs completed / evidence	
Top three next actions	
Budget / provider / dates	
Next review / unresolved items	

Repair closeout and household handoff

Confirm performance and preserve the next person’s starting point.

Compare completed work with the scope. Obtain operating instructions, maintenance requirements, and warranty and permit records.

At a sale or handoff, provide factual records and keep a copy. This log is not a warranty or substitute for required disclosures.

- Owner follow-up date: _____ Responsible provider: _____
- Do not sign a completion statement that conflicts with observed unfinished work.

Closeout item	Evidence / recipient / date
Agreed scope and change orders	
Installed models and materials	
Before / after photographs	
Test / inspection / permit results	
Operation demonstrated	
Maintenance instructions	
Warranty and transfer terms	
Unresolved items and limitations	
Recheck after rain / normal use	
Emergency locations and contacts	
Records transferred / date	

R

Reference and index

Source guide, data sources added in this edition, terms, and subject index.

Source guide **116**

Terms **119**

Subject index **120**

Source guide

Selected primary guidance reviewed for the 2026 edition, followed by the data sources used for charts and statistics added in the enhanced edition.

01	CPSC · GFCI fact sheet Ground-fault protection, testing, and limitations. www.cpsc.gov/s3fs-public/099_0.pdf
02	CPSC · AFCI fact sheet Arc-fault protection and electrical fire prevention. www.cpsc.gov/s3fs-public/5133.pdf
03	U.S. Fire Administration · Appliance and electrical fire safety Everyday appliance, cord, and electrical precautions. www.usfa.fema.gov/prevention/home-fires/prevent-fires/appliance-and-electrical/
04	U.S. Fire Administration · Smoke alarms Placement, testing, replacement, and escape readiness. www.usfa.fema.gov/prevention/home-fires/prepare-for-fire/smoke-alarms/
05	U.S. Fire Administration · Carbon monoxide poisoning prevention CO sources, alarms, and prevention. www.usfa.fema.gov/prevention/life-safety-hazards/carbon-monoxide/
06	CPSC · Portable generator safety alert Outdoor placement, 20-foot separation, exhaust, CO response, and electrical hazards. www.cpsc.gov/s3fs-public/468-WhattoKnowGenerators_2022.pdf
07	CPSC · Avoiding tap water scalds Temperature and burn-risk guidance. www.cpsc.gov/s3fs-public/5098.pdf
08	ENERGY STAR · Maintenance checklist Heating and cooling service, filters, and drainage. www.energystar.gov/saveathome/heating-cooling/maintenance-checklist
09	U.S. EPA · Protect your home's water Private-well testing and contamination concerns. www.epa.gov/privatewells/protect-your-homes-water
10	U.S. EPA · How to care for your septic system Inspection, pumping, and disposal-area care. www.epa.gov/septic/how-care-your-septic-system
11	U.S. EPA · A brief guide to mold, moisture, and your home Humidity, drying, and cleanup decisions. www.epa.gov/mold/brief-guide-mold-moisture-and-your-home
12	U.S. EPA · Air cleaners and air filters in the home Source control, ventilation, and filtration limitations. www.epa.gov/indoor-air-quality-iaq/air-cleaners-and-air-filters-home
13	U.S. EPA · Should you have the air ducts in your home cleaned? When cleaning may be appropriate and what it cannot fix. www.epa.gov/indoor-air-quality-iaq/should-you-have-air-ducts-your-home-cleaned
14	U.S. EPA · Radon Testing and risk-reduction resources. www.epa.gov/radon

-
- 15** **CPSC** · Safety barrier guidelines for residential pools
Residential barriers and layers of protection.
www.cpsc.gov/s3fs-public/362%20Safety%20Barrier%20Guidelines%20for%20Pools.pdf
-
- 16** **U.S. EPA** · Reduce the risk of lead exposure at home
Lead paint and renovation precautions.
www.epa.gov/lead/reduce-risk-lead-exposure-home
-
- 17** **U.S. EPA** · Protect your family from exposures to asbestos
Avoiding disturbance of suspect material.
www.epa.gov/asbestos/protect-your-family-exposures-asbestos
-
- 18** **Texas Department of Insurance** · Winter safety
Freeze preparation and post-freeze response.
tdi.texas.gov/tips/winter-safety.html
-
- 19** **Texas A&M AgriLife** · Foundation moisture care
Consistent soil moisture, slow application, and avoiding concentrated watering. Adapt to the property; no universal DFW schedule.
galveston.agrilife.org/files/2012/03/08-12-2015-Drought-Conditions-Pose-Threat-to-Home-Foundations-by-Dr.-William-M.-Johnson.pdf
-
- 20** **CPSC** · Automatic garage-door opener safety rules
Protective features and monthly tests under equipment instructions.
www.cpsc.gov/Newsroom/News-Releases/1993/Safety-Commission-Publishes-Final-Rules-For-Automatic-Garage-Door-Openers
-
- 21** **National Weather Service** · Thunderstorm safety
Preparation, shelter, and post-storm guidance.
www.weather.gov/safety/thunderstorm
-
- 22** **U.S. EPA WaterSense** · Fix a Leak Week
Meter observations and household leak awareness.
www.epa.gov/watersense/fix-leak-week
-
- 23** **CPSC** · Pool Safely
Supervision, suction safety, and emergency readiness.
www.poolsafely.gov/parents/safety-tips/
-
- 24** **CDC** · Pool chemical safety
Chemical-label handling and secure storage.
www.cdc.gov/healthy-swimming/toolkit/pool-chemical-safety.html
-
- 25** **USFA** · Dryer and garage fire safety
Annual dryer duct cleaning and load-by-load lint care.
www.usfa.fema.gov/prevention/home-fires/prevent-fires/basement-and-garage/
-
- 26** **ENERGY STAR** · Heating and cooling
Monthly filter checks and practical replacement guidance.
www.energystar.gov/saveathome/heating-cooling
-
- 27** **Rheem** · Tank water-heater care
Model-specific maintenance and annual service planning.
www.rheem.com/water-heating/articles/keeping-your-water-heater-at-its-best-tank-edition/
-
- 28** **Rheem** · Tankless water-heater care
Service and descaling adjusted to the model and water.
www.rheem.com/water-heating/articles/keeping-your-water-heater-at-its-best-tankless-edition/
-
- 29** **CPSC** · Federal Pacific Stab-Lok
Agency statement and limits of the historical investigation.
www.cpsc.gov/Newsroom/News-Releases/1983/Commission-Closes-Investigation-Of-FPE-Circuit-Breakers-And-Provides-Safety-Information-For-Consumers
-
- 30** **CPSC** · Repairing aluminum wiring
Older aluminum branch-circuit connection concerns.
www.cpsc.gov/s3fs-public/516.pdf
-

- 31** **HUD** · The Rehab Guide Volume 8 HVAC/Plumbing
Older plumbing materials, including polybutylene.
www.huduser.gov/publications/pdf/hvac.pdf

Data and statistics sources added in the enhanced 2026 edition

- 32** **NOAA NCEI** · U.S. Climate Normals 1991–2020, DFW Airport
Monthly precipitation and temperature; heat and freeze day counts.
www.ncei.noaa.gov/products/land-based-station/us-climate-normals
- 33** **NOAA NCEI** · Global Historical Climatology Network daily data
Daily DFW Airport temperatures used to count 100°F days.
www.ncei.noaa.gov/products/land-based-station/global-historical-climatology-network-daily
- 34** **National Weather Service Fort Worth** · February 2021 winter event
Winter Storm Uri temperatures and duration at DFW.
www.weather.gov/fwd/Feb-2021-WinterEvent
- 35** **NOAA Storm Prediction Center** · Severe weather database
Hail reports used for monthly and county analysis.
www.spc.noaa.gov/wcm/
- 36** **NOAA NCEI** · Billion-Dollar Weather and Climate Disasters
Inflation-adjusted cost of major Texas hail events.
www.ncei.noaa.gov/access/billions/
- 37** **Texas Department of Insurance** · February 2021 winter weather data call
Claims and insured losses by county.
www.tdi.texas.gov/reports/documents/feb2021-tx-winter-weather-summary-july2021.pdf
- 38** **Insurance Information Institute** · Hail and homeowners insurance facts
Hail events by state; claim frequency and severity by cause.
www.iii.org/fact-statistic/facts-statistics-homeowners-and-renters-insurance
- 39** **USDA NRCS** · Web Soil Survey, SSURGO, and Houston Black series
Soil composition and shrink-swell properties.
soilseries.sc.egov.usda.gov/OSD_Docs/H/HOUSTON_BLACK.html
- 40** **U.S. Drought Monitor** · County statistics
Share of weeks in drought, 2000–2026.
droughtmonitor.unl.edu/
- 41** **NFPA** · Home Structure Fires (2025) and Smoke Alarms in U.S. Home Fires (2024)
Fire causes and smoke-alarm effectiveness.
www.nfpa.org/education-and-research/research/nfpa-research/fire-statistical-reports
- 42** **U.S. Fire Administration** · Electrical malfunction fire trends; dryer fires
Residential electrical and dryer fire statistics.
www.usfa.fema.gov/statistics/residential-fires/electrical.html
- 43** **CDC** · Carbon monoxide poisoning; older adult falls
CO deaths and visits; fall statistics.
www.cdc.gov/carbon-monoxide/about/index.html
- 44** **CPSC** · Pool or Spa Submersion, 2026 Report
Child drowning statistics.
www.cpsc.gov/Newsroom/News-Releases/2026/CPSC-Report-Highlights-Persistent-Risk-of-Childhood-Drowning
- 45** **Texas DFPS** · Child drownings
Texas child drowning counts and locations.
www.dfps.texas.gov/About_DFPS/Child_Drownings/
- 46** **U.S. Department of Energy** · Energy Saver
Water-heater life and energy use; air-conditioner filter savings.
www.energy.gov/energysaver/water-heating

47	ENERGY STAR · Duct sealing Typical duct leakage. www.energystar.gov/saveathome/heating-cooling/duct-sealing
48	InterNACHI · Standard Estimated Life Expectancy Chart for Homes Component life ranges for reserve planning. www.nachi.org/life-expectancy.htm
49	Federal Trade Commission · Warranties for New Homes; home warranties New-home warranty structure and service-contract cautions. consumer.ftc.gov/articles/warranties-new-homes
50	TDLR · Residential service companies Licensing of home warranty companies in Texas. www.tdlr.texas.gov/scp/residential-service-company-transfer.htm
51	Texas Department of Insurance · Home Insurance Guide Exclusions, claim steps, and prompt-payment deadlines. www.tdi.texas.gov/pubs/consumer/cb025.html
52	Texas Property Code Chapter 27 · Residential Construction Liability Act Notice and offer-to-repair process for construction defects. statutes.capitol.texas.gov/Docs/PR/htm/PR.27.htm

Texas license links appear in [Choose the right Texas provider](#) (page 89). Manufacturer sources are examples, not brand endorsements. Follow the manual for your own model. Figures labeled “Stonebriar analysis” were calculated from the cited public data sets in October 2026.

Terms and using the references

Plain-language definitions for the terms used throughout the handbook.

The source guide identifies public educational references reviewed October 11, 2026. The explanations, diagrams, checklists, and records are original Stonebriar material or retained and edited from the existing Stonebriar manuscript. No government agency endorses this publication.

This is maintenance education, not a code inspection or engineering opinion. Guidance can change. Use current manufacturer instructions and adopted local requirements for the actual equipment and project. The qualified provider should reconcile differences before work begins.

Term	Meaning
AFCI	Protection intended to interrupt certain hazardous electrical arcing conditions.
GFCI	Protection that responds to a ground-fault current imbalance.
Condensate	Water collected as humid air cools or produced by some combustion equipment.
Flashing	Material arranged to redirect water at a roof or wall transition.
Weep	An intended drainage opening in a wall or window assembly.
Relative humidity	Water vapor in air relative to its saturation level at that temperature.
Backflow	Flow opposite the intended direction, potentially contaminating a supply.
Thermal expansion	An increase in water volume as it heats; control is system-specific.
Bonding	Electrical connection of conductive parts to reduce voltage differences.

Term	Meaning
Differential movement	Parts of a structure or supporting soil moving by different amounts.
LEP	Linear extensibility percent: a soil's change in length between moist and dry conditions; a measure of shrink-swell.
Residential service contract	The Texas legal term for a home warranty; licensed by TDLR.
WDI	Wood-destroying insect, such as subterranean termites.
RCLA	Texas Residential Construction Liability Act, Property Code Chapter 27.

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Condo inspections

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