LIT OUTDOOR LIGHTING

A HOMEOWNER'S GUIDE

The Christmas Lights

DIY Guide

Everything we wish every DIY homeowner knew before starting.

The tools, the math, the risks — and every mistake we've watched other people make.

NO SALES PITCH
HELPFUL EITHER WAY

WELCOME

If you're going to do this yourself, we want you to *do it right*.

This isn't a sales pitch in disguise. If you've decided to hang your own Christmas lights this year, we want you to do it safely, make it look great, and avoid the mid-install calls we get every December from people who learned the hard way.

We've seen just about every way this project goes sideways — from the ladder-fall ER visit to the breaker that trips every time someone turns on the microwave, to the beautifully-planned install that went dark on December 23rd because of one connection that wasn't sealed against rain.

This guide walks through everything we wish every DIY homeowner knew before starting: the gear you'll really need, the safety steps that actually matter, the honest installation timeline, and the most common mistakes that wreck the result.

> **Our promise to you**
>
> If, after reading this, you decide the juice isn't worth the squeeze — we're here. But either way, take what's in this guide and use it. A safe install is the goal, no matter who does it.

CONTENTS

What's *inside*

Eight chapters on doing it yourself — plus the pre-install safety checklist you should run before climbing.

PLUS — THE PRE-INSTALL SAFETY CHECKLIST

01 CHAPTER ONE · THE GEAR

What you *actually* need.

Most DIY homeowners underestimate the gear list. Here's the honest version. Every item on this list exists because leaving it out has sent someone else back to the store — or to the hospital.

Lights & Electrical

- ☐ Commercial-grade LED strands (enough for your measured footage + 15%)
- ☐ Outdoor-rated extension cords (14-gauge minimum)
- ☐ Outdoor timer or smart plug
- ☐ GFCI outlet tester
- ☐ Weatherproof outlet covers
- ☐ Roof clips (type depends on your roof/gutter)
- ☐ Weatherproof cord connectors
- ☐ Electrical tape (outdoor grade)
- ☐ Backup strands (1–2 extras)

Ladders & Climbing

- ☐ Extension ladder rated for your home height
- ☐ Ladder stabilizer / standoff arm
- ☐ Non-slip work shoes
- ☐ Ladder levelers (for uneven ground)
- ☐ Work gloves (insulated for cold)
- ☐ Tool belt or bucket with rope
- ☐ Safety harness (for heights above 15 ft)
- ☐ Headlamp (shorter days than you think)

Hand Tools

- ☐ Tape measure (100-foot)
- ☐ Chalk or painter's tape (marking)
- ☐ Screwdriver set
- ☐ Pliers and wire cutters
- ☐ Stud finder (for securing to trim)
- ☐ Utility knife
- ☐ Continuity tester (for dead strand diagnosis)

Storage & Takedown

- ☐ Heavy-duty storage bins (not cardboard)
- ☐ Labels and a sharpie
- ☐ Strand spools or cardboard wraps
- ☐ Zip ties
- ☐ Desiccant packs for storage bins
- ☐ A climate-controlled place to put it all

> *Budget for all of this **before** the first strand goes up. A typical first-year DIY install for a medium home runs **$400–$900 in materials and gear** — and that's before the cost of the lights themselves.*

02 CHAPTER TWO

Ladder safety. Read this *first*.

— THE HONEST NUMBERS

Ladder falls send roughly **160,000 Americans** to the ER every year. December is one of the peak months — specifically because of Christmas light installs. The average ER bill for a fall injury is **$15,000+** before any surgery. More severe falls average $45,000+ and sometimes end careers.

— THE BIGGEST MISTAKES

Climbing without anyone home. Placing the ladder at the wrong angle (remember the 1-in-4 rule: for every 4 feet of height, the base should be 1 foot from the wall). Failing to tie off the top when working above 15 feet. Overreaching sideways — your hip should *never* leave the plane of the side rails. Standing on the top two rungs.

— BEFORE EVERY CLIMB

Inspect the ladder for cracks, loose rivets, or missing non-slip feet. Check that the ground is **flat, firm, and dry** — not leaves, not wet grass, not gravel. Install a ladder stabilizer against the roof or gutter. Wear non-slip footwear. Empty your pockets. Tell someone you're going up, and when.

> *"If any step requires overreaching, standing on the top rung, or putting weight on a gutter — stop. Move the ladder. The extra 15 minutes is worth a lifetime of not being in a wheelchair."*

03 CHAPTER THREE

Choosing lights that *actually* last.

WHAT THE LABELS MEAN

UL or ETL Listed is the minimum safety standard for outdoor use — anything without it goes back on the shelf. **Outdoor/Wet-rated** is what you want (not "damp"). **Commercial-grade** means sealed sockets, solid copper wire, and individually replaceable bulbs. **Residential** means injection-molded plastic that gets thrown away when one bulb fails. **C9** bulbs are the large ones best for rooflines. **C7** are mid-size. **Mini** lights are for trees and wreaths.

THE BUDGET TRAP

Most homeowners budget $150–$300 for lights. Quality commercial-grade lights for a full home run **$600–$1,200** — more for larger homes. Budget lights typically need to be replaced within **2 seasons**. Over five years, cheap lights often cost **1.5× more** than buying quality once.

WHAT THE BOX DOESN'T TELL YOU

"Lifetime" warranties usually cover only manufacturer defects, not weather damage. "Shatterproof" doesn't mean the socket is sealed. Color-changing strands rarely hold up past year two. And the super-long strands (100+ bulbs) often exceed safe amp load when chained — which is how breakers get tripped on Christmas Eve.

04 CHAPTER FOUR

Measuring and planning (the part everyone *skips*).

WHY IT MATTERS

The #1 DIY mistake is underestimating linear footage. You think your roof is 60 feet of eaves. It's actually 110 — because you forgot the dormers, the garage, and the entryway peak. Now you're driving back to Home Depot at 4pm on a Sunday, and they're out of your bulb color.

WHAT TO MEASURE

Main roofline (all eaves, including the back). Every dormer (each has three sides). Garage and secondary structures. Entry peaks and gables. Any tree or shrub you want lit. And — often forgotten — the distance from your nearest outdoor outlet to where the first fixture actually starts.

THE HONEST TIME BUDGET

Measuring the house: **1–2 hours**. Drawing a layout and doing the math: **another hour**. Shopping for the right quantity and type: **1–2 trips**, typically 2+ hours. That's **4–6 hours of prep before you hang a single light**. Most DIY homeowners skip it. Most DIY homeowners also make three trips to the store.

ALWAYS ADD 10–15%

Waste from cutting. Damage on unboxing. Rerouting a strand around a branch you forgot. A strand that comes up six inches short at the very end is the single most frustrating moment of any Christmas install.

05 CHAPTER FIVE

Outdoor electrical: the part that matters *most*.

DO THE AMP MATH

A typical outdoor circuit is rated for 15 or 20 amps. It probably shares that circuit with other outlets on the same side of the house — the garage, a bathroom, the porch. A 15-amp circuit maxes at 1,800 watts, and safe loading is around 1,440 watts (80%). Mini LED strands draw ~4W per 50 bulbs. C9 LEDs draw ~50W per 25 bulbs. Incandescent C9s draw ~250W per 25 bulbs (five times the load). **Tripping breakers on Christmas Eve is its own special misery** — do the math first.

GFCI IS NOT OPTIONAL

All outdoor outlets must be GFCI-protected by code. If your home doesn't have one outside, your options are: an electrician installs one ($200–$400), use a GFCI extension cord ($30–$60), or run power from a garage outlet — which means cords across the ground, which has its own problems.

EXTENSION CORD GAUGE MATTERS

16-gauge: short runs under 25 feet only. **14-gauge is the minimum for outdoor Christmas lights.** 12-gauge for runs over 50 feet or high-draw loads. Undersized cords drop voltage (dimmer lights at the end of your run) *and* get warm. Warm cords near dry leaves is how garage fires start in January.

EVERY CONNECTION, SEALED

Every cord-to-cord joint outside needs rain and snow protection. Plastic connection covers blow away. Electrical tape works but looks messy. Weatherproof junction boxes are the right answer ($8–$15 each) — and you'll need one at every connection.

06 CHAPTER SIX

Installation day: the *honest* timeline.

WHAT THE INTERNET TELLS YOU

"A typical home takes 2–3 hours to light."

WHAT IT ACTUALLY TAKES

For a first-year DIY on a medium single-story home: setting up and moving the ladder (**2+ hrs cumulative**), attaching clips to the eaves (**2–3 hrs**), running strands along the roofline (**2–4 hrs**), running and hiding extension cords (**1–2 hrs**), testing and fixing dead bulbs (**1–2 hrs**), final adjustments (**1 hr**). Realistic total: **9–14 hours**, split across 2–3 days so you're not climbing tired. For a two-story home: **14–20 hours**.

> *"You'll finish at 9 p.m. by flashlight, with cold fingers, because one strand you tested in October is dead and the replacement clips don't fit your gutter."*

WHAT GOES WRONG

Weather ruins the planned install day (you'll check the forecast three times). A strand that tested fine last year is dead. The clips don't fit your gutter profile. The extension cord that was supposed to be fine trips the breaker. You run out of daylight. At least one bulb breaks while you're handling it. And three days before Christmas, a section goes dark.

07 CHAPTER SEVEN

Weatherproofing, takedown, and the *off-season*.

WHERE WATER GETS IN

Most DIY Christmas light failures come from water infiltration. It gets in between the bulb and the socket (especially on replaceable-bulb strands where the bulb isn't fully seated), at any unsealed cord-to-cord connection, through cracks in a cracked housing, and at the plug end of the strand where the wire meets the molded plug. Once water's inside, it freezes, expands, cracks the housing, and shorts.

TAKEDOWN IS HALF THE WORK

Same ladder time. Same height risk. Usually done when you're tired of the season and ready to be done with it. **It's the step DIY homeowners rush through — which is when takedown injuries happen.**

STORAGE THAT ACTUALLY WORKS

Individual strand wraps (the cardboard from the original packaging works). Labeled bags with notes like "front roofline, starts at east corner" — so next year doesn't require figuring it all out from scratch. **Climate-controlled space** — not an attic (temperature swings), not an outdoor shed (moisture). Off the ground. Not at the bottom of a heavy stack.

> *"Lights stored wrong last two years. Lights stored right last eight to ten. The difference is all effort, at the end of a job you're already exhausted from."*

08 CHAPTER EIGHT

The fifteen most common *mistakes*.

Every one of these we've watched a neighbor, a customer, or a friend make. Most are fixable. A few aren't. All are avoidable.

01 **Buying cheap lights** — commercial-grade lasts 4× longer and costs less per year.

02 **Installing in one day** — exhaustion causes falls. Split across 2–3 sessions.

03 **Skipping the layout plan** — adds 4+ hours to install time.

04 **Indoor cords used outside** — fire risk, not rated for moisture.

05 **Overloading a circuit** — breaker trips, lights fail. Do the watt math first.

06 **Chaining too many strands** — most are rated for 3–5 connected max.

07 **Unsealed connections** — the #1 cause of mid-season failures.

08 **Staples directly on wire** — damages insulation, creates fire risk.

09 **Lights on growing trees** — branches rub wire insulation off over time.

10 **Non-GFCI outdoor outlets** — violates code in most jurisdictions, and it's dangerous.

11 **Metal ladders near power lines** — doesn't need explanation.

12 **No ladder spotter** — a spotter makes falls 80% less likely.

13 **Skipping the timer** — 3 a.m. lights cost money and annoy neighbors.

14 **Storing in an attic** — temp swings destroy wiring within 3 seasons.

15 **Assuming last year's strands still work** — test every strand *before* climbing.

BONUS SECTION

Pre-install *safety* checklist.

Run through every item before you climb. Every single one is on this list because skipping it has sent someone to the hospital.

Weather & Timing

- ☐ Forecast confirmed — no rain, winds under 15 mph
- ☐ Daylight hours sufficient for planned work
- ☐ You're not tired, distracted, or medicated
- ☐ No alcohol in the last 4 hours
- ☐ Someone at home knows you're on a ladder
- ☐ Phone charged and accessible

Ladder Check

- ☐ Rated for your weight plus tools and lights
- ☐ Tall enough for the work + one extension
- ☐ No cracks, broken rungs, or missing feet
- ☐ Non-slip shoes on you and any spotter
- ☐ Base on dry, firm, level ground
- ☐ 1-in-4 angle rule confirmed
- ☐ Ladder stabilizer or standoff installed
- ☐ Top tied off if above 15 feet

Electrical Prep

- ☐ All circuits identified and mapped
- ☐ Total wattage under 80% of circuit capacity
- ☐ GFCI tested working on every outlet used
- ☐ All cords outdoor-rated, proper gauge
- ☐ No cords through gutters or standing water
- ☐ All connections elevated off ground

Tools & Gear

- ☐ Sharp tools in a belt, not pockets
- ☐ No loose items that could fall on a spotter
- ☐ Gloves on for wire handling
- ☐ Eye protection within reach
- ☐ Bucket on a rope for tool passing

Physical Readiness

- ☐ Eaten within the last 2 hours
- ☐ Hydrated
- ☐ Not climbing alone for roof work
- ☐ First aid kit nearby
- ☐ Address of nearest ER known

If Anything Fails This Check

- ☐ Do not climb
- ☐ Reschedule for a better weather day
- ☐ Ask a friend or neighbor to spot you
- ☐ Or call us: **(985) 244-7733**

A NOTE FROM OUR TEAM

Here when you *need us* — even if it's just this guide.

We hope this guide gives you what you need to do your Christmas lights safely and well. Most of what's in here comes from watching — and occasionally helping clean up — installs that went sideways in ways that were totally preventable.

If halfway through a Saturday you find yourself at the top of a wobbly ladder with a tangled strand in one hand and a question you didn't know you'd have — we're here. We pick up. We've seen every kind of install situation, including rescuing the half-finished ones.

We started Lit Outdoor Lighting in 2021. Christmas is a big part of what we do. And even if you never call us, we hope the work goes well.

Melissa & Jonathan

IF IT BECOMES TOO MUCH

We can take it from *here*.

CALL OR TEXT

(985) 244-7733

LIT OUTDOOR LIGHTING