What to Know About Asphalt Shingle Roof Installation for Your Home

Having installed roofs in Austin, TX for over a decade, I've seen a lot of homeowners get fixated on shingle color and overlook the details that actually determine whether a roof lasts thirty years or starts leaking in five. Asphalt shingles remain one of the most popular choices in Central Texas because they balance cost, durability, and aesthetics. But the quality of an asphalt shingle roof installation depends on much more than the shingles themselves. The underlayment, the fasteners, the flashings, and even the weather on the day of installation all matter.

Let me walk through what I've learned about getting this right, from the prep work to the final ridge cap. Whether you're planning a new build or a tear-off replacement, understanding these steps will help you talk to contractors with confidence and avoid costly shortcuts.

Preparation: The Foundation of a Lasting Roof

Before a single shingle goes on, the roof deck needs to be clean, dry, and structurally sound. I always start by inspecting the sheathing for rot or soft spots. In older Austin homes, it's common to find decking that's been patched multiple times. If the deck isn't solid, no shingle will fix that.

Next comes the roof underlayment. This is your secondary waterproof layer, and it's non-negotiable. I prefer a self-adhering ice and water shield in valleys and along eaves, with a synthetic underlayment covering the rest of the roof. Building codes in Austin, TX require at least one layer of underlayment, but I've seen too many wind-driven rain events to stop there. A good underlayment buys you time if a shingle ever gets lifted by a gust.

I also install a drip edge along the eaves and gables. It's a simple metal flashing that directs water away from the fascia and into the gutters. Without it, water can wick back under the first course of shingles and rot the deck. A drip edge is cheap insurance.

Laying the Groundwork: Starter Strip and Flashing

Most people don't realize that the first course of shingles isn't full-sized. You start with a starter strip, which is essentially a row of shingles with the tabs cut off. This seals the eaves and provides a straight edge for the first full course. I snap a chalk line about six inches up from the drip edge to keep everything aligned. A chalk line is one of those simple tools that saves hours of frustration later.

At this stage, any valleys or penetrations need to be flashed with roofing felt and asphalt cement. I cut the felt in wide strips, embed it in hot asphalt cement, and lap it carefully so water flows over the seams, not into them. For pipes and vents, I use a roofing torch to weld modified bitumen flashings around the base. Yes, a roofing torch is dangerous, OSHA requires a fire extinguisher within ten feet and a spotter on every job. I follow that rule religiously.

Choosing Your Asphalt Shingles: 3-Tab, Architectural, or Impact-Resistant

Once the prep is done, it's time to pick your shingles. The three main options I work with in Austin are 3-tab shingles, architectural shingles, and impact-resistant shingles. Each has its own installation quirks and cost profile.

3-Tab Shingles

These are the classic budget option. They're lightweight, easy to cut with a utility knife, and install fast. A crew can cover a lot of square footage in a day. But they're thin, and in our Texas heat, they can curl or crack sooner than heavier shingles. I recommend 3-tab only if you're on a tight budget or plan to sell the house within five years. For the do-it-yourselfer, they're the most forgiving material to work with.

Architectural Shingles

Architectural shingles are thicker and have a more dimensional look. They mimic the appearance of wood shakes or slate without the weight. Installation requires more care because the shingles are heavier and less flexible. You'll need a roofing hammer to drive the nails flush without damaging the surface. The exposure, the part left visible, is shorter, so you use more shingles per square foot. That adds to the cost, but the curb appeal is real. On a ranch-style house or a Craftsman bungalow, architectural shingles look like they belong.

Impact-Resistant Shingles

Impact-resistant shingles are the toughest of the bunch. They're reinforced with a fiberglass mat or a polymer coating that makes them resist hail and falling branches. In Austin, where spring storms can bring golf-ball-sized hail, these are worth the premium. Installation is similar to architectural shingles, but you have to be careful not to overdrive the roofing nails, which can crack the reinforced layer. I use a pneumatic nailer set to the right depth, but some old-timers still prefer a hammer for the tactile feedback.

Royal shingles are a brand I've used on several jobs. They're an architectural-grade product with a 30-year warranty and a color palette that holds up well under UV. If you're considering

them, just know that they require a specific nailing pattern, typically four nails per shingle instead of the usual two. It takes longer, but the wind resistance is noticeably better.

The Core Process of Asphalt Shingle Roof Installation

With the starter strip in place and the valleys flashed, the actual asphalt shingle roof installation begins. I work from the eaves up, overlapping each course so the nails of the lower course are covered by the next row. The key measurement is the exposure, usually five to six inches for most asphalt shingles. I snap a chalk line every few courses to keep the rows straight. Nothing looks worse than a roof where the shingles wander off level.

Nails should be long enough to penetrate the sheathing by at least 3/4 inch. I use ring-shank roofing nails for their holding power. Smooth shanks can work loose over time, especially in wind. Drive the nail flush but not so deep that it breaks the shingle. A dimpled surface around the nail head is a sign you've gone too far.

Valleys get special attention. I weave the shingles across the valley, trimming them with a utility knife so they lap at least six inches on each side. Some contractors use open valleys with metal flashing, but I prefer a woven valley with roofing felt underneath. It's more labor-intensive, but it handles water better in heavy rain.

Finishing Touches: Ridge Cap and Flashing

When the field of the roof is done, I cap the ridge with pre-formed ridge cap shingles. These are designed to flex over the peak and shed water on both sides. I nail them with longer fasteners that bite into the ridge beam. If the ridge isn't straight, I adjust the shingles as I go. A crooked ridge cap ruins the whole look.

Every penetration, plumbing vents, exhaust fans, skylights, gets a metal or rubber boot flashed with asphalt cement and roofing felt. I pay extra attention to the back side of chimneys, where water tends to pool. A layer of ice and water shield under the flashing adds another level of protection.

Cost Considerations and Real-World Trade-Offs

In my experience, the cost of asphalt shingle roof installation varies more with the complexity of the roof than with the shingle type. A simple gable roof with few penetrations is straightforward. A roof with multiple valleys, dormers, and skylights can double the labor time. I always tell homeowners to budget for at least one extra day of labor for every valley or chimney.

3-tab shingles are the cheapest upfront, but their shorter lifespan means you'll re-roof sooner. Architectural and impact-resistant shingles cost more now but can last 30 to 40 years with proper maintenance. If you plan to stay in the house, the premium pays for itself.

One thing that surprises people is the cost of underlayment and flashings. A good ice and water shield costs more than basic felt, but it's a fraction of the cost of repairing water damage. I've seen too many roofs where the shingles look fine but the deck is rotted because the underlayment failed. Don't skimp on the stuff you can't see.

Safety and Code Compliance

Working on a roof is inherently dangerous. OSHA requires fall protection for any work above six feet. On my jobs, that means harnesses, anchor points, and a spotter on the ground. I also keep a roofing torch at least 10 feet from any combustible material, and I never use it on a windy day.

Building codes in Austin, TX have specific requirements for roof slope, underlayment type, and nailing patterns. Most jurisdictions require a permit for a full roof replacement, and the inspector will check the underlayment before the shingles go on. I've had to re-do sections because the nails were too short or the laps were insufficient. It's frustrating, but the code exists for a reason. A roof that passes inspection is a roof that will protect your home.

Final Thoughts from the Job Site

Asphalt shingle roof installation is a craft that rewards patience and attention to detail. The materials have improved over the years, better UV resistance, stronger reinforcement, but the fundamentals haven't changed. Good underlayment, proper nailing, careful flashing, and a straight layout are what separate a roof that lasts from one that fails.

If you're hiring a contractor, ask about their nailing pattern and underlayment choices. Watch them snap a chalk line. If they can't explain why they do what they do, find someone else. A roof is too important to trust to guesswork.