



INSTALLING A NEW ROOF?

Materials, Tips and Considerations



Everyone deserves to have a roof over their head.

*Why not make it a long-lasting, resilient one?
We'll help you choose a roof that will protect
your facilities, your people and the services you
provide to the community for years to come.*

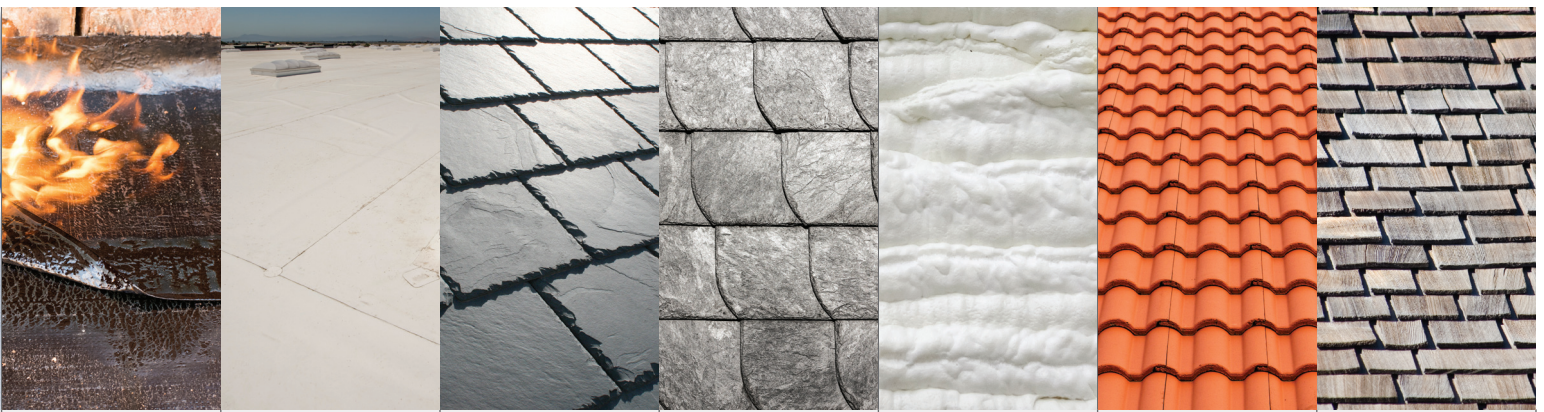
There are many elements to consider before re-roofing, including budget, lifespan, materials and even color. Here's what you need to know about some of the most commonly used roofing products.



ROOFING PRODUCTS					
	ASPHALT SHINGLES <i>(architectural shingles)</i>	ASPHALT SHINGLES <i>(three-tab shingles)</i>	BUILT-UP ROOF (BUR) <i>(tar and gravel)</i>	METAL SHINGLES	METAL – STANDING SEAM
UPKEEP	Minimal	Minimal	Minimal	Minimal	Moderate to frequent <i>(if repainting is required)</i>
ESTIMATED COST	Economical	Economical	Economical Least expensive of the flat roof options	Moderate	Moderate
LIFE EXPECTANCY ²	20 years	15 years	10–25 years	40–50 years	50–75 years
CONSTRUCTION DIFFICULTY ³	Basic	Basic	Basic <i>(labor intensive)</i>	Intermediate <i>(must accommodate roof penetrations)</i>	Intermediate <i>(must accommodate roof penetrations)</i>
CONSIDERATIONS	Extra durability and style over three-tab shingles; One of the least energy-efficient and earth friendly materials.	Inexpensive; Relatively short life-span; Easy to repair; One of the least energy-efficient and earth friendly materials.	Low maintenance; Highly durable; Difficult installation – risk of hazardous fumes.	Low maintenance; Lighter than other options so structural reinforcement may not be required; Reduce cooling costs in summer; Reduce snow and ice buildup in the winter.	Fire resistive; Will not crack or rot; Reflects heat reducing energy costs; Higher gage metal dents easier.

²A roof's life expectancy depends on variables such as sun exposure, weather-related damage, the complexity of the roof, proper ventilation and the height and location of the building. These lifespans are only estimates.

³Construction difficulty refers to the complexity of required labor, equipment and materials. "Basic" means it's relatively easy to install, "intermediate" requires additional training or equipment and "complex" requires specialized skills and tools.



MODIFIED BITUMEN	SINGLE-PLY MEMBRANES (EPDM, PVC and TPO)	SLATE	SLATE - SYNTHETIC	SPF - SPRAYED POLYURETHANE FOAM	TILE ROOFING (concrete or clay tile)	WOOD SHAKES/WOOD SHINGLES
Minimal	Frequent (reseal seams every five years)	Moderate to Frequent (replacing broken tiles)	Minimal to Moderate (checking for loose or broken tiles)	Frequent (inspections needed annually and recoating needed every 10-15 years)	Moderate to Frequent	Frequent
Expensive Torch-down installation increases cost	Moderate Light-colored coatings (recommended in warm climates) can add 30% to the cost	Very Expensive	Expensive	Moderate Higher-Density foams increase cost	Moderate	Expensive
20-30 years	20-50 years	50-75 years	50-75 years	30 years	25-50 years	20-30 years
Intermediate	Basic	Complex	Intermediate	Basic	Intermediate	Intermediate to complex
Durable; Torches or hot-air welders used for installation creating fire hazard.	Easy installation; Lightweight and flexible; Can puncture easily.	Fire resistive; Very expensive; Heavy - may require structural reinforcement; Long lasting.	Lightweight; Long lasting; Fraction of the cost of Slate.	Easy installation; Energy efficient; Easy maintenance but should be inspected at least twice a year; Overspray potential during installation.	Fire resistive; Extremely durable when maintained; Heavy - may require structural reinforcement; Prone to leaks, small cracks or holes and cracked or broken tiles.	Natural looking; Easy to repair or replace; Long lasting; Poor fire rating.

COMMON ROOFING MATERIALS

SLOPED ROOFS

Asphalt Shingles

Asphalt shingles are versatile and come in a variety of styles, shapes and colors, making them the most popular type of shingle for many types of buildings. Made of organic material, wood fibers or fiberglass, asphalt shingles are surfaced with mineral granules and can last from 15 to 20 years. Most asphalt shingles are class 3 or class 4.¹

Metal Roofing

Several materials can be used for a metal roof, including steel, aluminum, copper and standing seam. Metal roofs are resilient to the elements and are considered as class 4,¹ but hail can cause cosmetic denting. The average cost of a metal roof is two to three times more than asphalt shingles, but it will last 30 to 50 years, up to 100 years if copper is used.

Metal Shingles

An alternative to a standing seam metal roof, metal shingles are made by feeding metal coil into die stamps. The tiles can be stamped to mimic the appearance of wood shake, clay tiles or slate shingles. Like other metal roofing, metal shingles are more expensive than asphalt shingles, but last longer and are also considered a class 4.¹

Slate Shingles

Made of dense rock cut into shingle shapes, slate shingles are heavy and durable and come in various thicknesses and shapes. Slate shingles are considered virtually indestructible and are up to four times more expensive than asphalt shingles, but can last from 50 to 100 years if installed correctly.¹ Synthetic slate shingles are also available.

Tile Roofing

Because they're made of clay, concrete and rubber, tile roofing is incredibly durable and can last up to 50 years. Most tile roofs are class 3 or class 4.¹ However, the costs can be two to three times more than asphalt shingles, and the heavy tiles require extra structural support.

Wood Shakes

Good wood shakes are made from treated wood, often cedar, which helps them last up to 30 years. These types of roofs are class 3 or class 4.¹ Each shake is shaped slightly differently, giving a wood shake roof a unique look. The installation of wood shakes is typically two to three times more expensive than traditional shingles.

FLAT OR LOW-SLOPED ROOFS

Built-Up Roof (BUR or tar and gravel)

BUR is made of traditional hot tar and gravel, assembled in layers to form a built-up roof. The roof is weighted or ballasted with smooth river stone and can last up to 25 years and is classified as class 4 for ballast/gravel surfaces.¹

Modified Bitumen (or polymer-modified bitumen)

A single-ply rolled roof with a mineral-based surface, this type of roofing is adhered by the torch-down method — heating the adhesive on the back as it is unrolled. Modified bitumen also comes in a peel-and-stick form that is easier to install. Both types can last for 20 to 30 years, but torch-down is more expensive and has low hail performance.¹

Single-Ply Membrane

Single-ply membrane roofing is often used for commercial structures and can usually be installed in one layer. Materials include rubber (EPDM), PVC and TPO, a form of plastic. The layer is usually glued down, but can also be attached with anchored fasteners or ballasted with river stone. They come in various colors, including light shades for warm climates.

Single-ply membrane roofs can last from 20 to 50 years, but can be susceptible to punctures from branches or sharp objects. They are more expensive than BUR or modified bitumen and are also considered as class 4 for ballast/gravel surfaces.¹

Sprayed Polyurethane Foam (SPF)

Sprayed polyurethane foam is an inexpensive liquid that is applied over the existing roof, eliminating costs and labor associated with removing the old roof. A protective coating is sprayed on top of the SPF for additional durability. The foam itself will last for up to 30 years, while the protective coat may need reapplied every 10 to 15 years. Certain types of protective coating and higher density foams will increase the cost, but may also receive a class 4 rating.¹

¹Class 1–4 hail impact-resistant roofing classifications are categorized by Underwriter's Laboratories. The higher the number, the larger hail the roof can withstand. Higher hail impact classes also typically provide greater wind resistance. GuideOne recommends roofing materials with a class 3 or 4 rating in accordance with UL 2218 or FM 4473 testing. These standards are recognized by any roofer or building materials store and indicates the material has been tested for impact resistance.

TIPS FOR CHOOSING A ROOFING CONTRACTOR

Choose a Local Contractor

Local contractors are not just operating locally now, but have an established business and reputation in the community. Often times after a major storm, roofing contractors from neighboring states will set up shop temporarily. Usually when the work is finished, they return to their home state. By choosing a truly local contractor, you will have someone that will be around if issues arise later.

Make Sure the Contractor is Licensed

Most states require contractors to be licensed. You can ask the roofing contractor for a copy of their license or most states have licensing bureaus with websites where you can look up the licensing information. Some states require a separate license for residential and commercial roofing contractors. Check to make sure the roofing contractor has the correct type of license.

Check to Ensure the Contractor is Insured

Make sure the contractor has worker's compensation and liability insurance. Ask the contractor to provide you with a copy of the certificate. To take it a step further, you can call their insurance agent or carrier to confirm that the certificates are valid.

Avoid Door-to-Door Roofing Salesmen

Choose a roofer from a referral or a sign in your area that has a satisfied client on the other end. Ask the contractor to provide you with a list of past customers you can call. You can also contact your agent and ask for a recommendation. Don't sign an intent letter. Wait to see the contract and take your time reviewing it. Make sure the contract is complete including the cost for the work.

Handle Your Own Claim

Contractors who say they are "a claim specialist" or can "handle your insurance claim" may be breaking the law. In most states, it is illegal for contractors to act on behalf of the insured when negotiating an insurance claim. Any contractor who opens the door to potential legal action is not acting in your best interest.

Don't Give in to Pressure

Be wary of a contractor who pressures you to sign a contract before the insurance company has estimated the damage. Some contractors say they can work with whatever your insurance company settles on.

Make Sure the Old Roof is Removed

Local code may allow for an additional layer of shingles over an old roof, but your insurance has likely included the cost to tear the old roof off. While avoiding this step can reduce the cost of a new roof, adding another layer of roofing adds additional weight, and does not allow for a proper inspection of the roofing material below the first layer.