

DURABILITY INCLUDED FIRE RESISTANCE

Metal Roofs and Fire Means Protection is Priceless



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...homeowners looking to enhance their fire safety. Their fire-resistant qualities, longevity, and durability also make metal roofs very appealing to insurance companies. The most important distinctions between metal roof panels and asphalt shingles is time and the materials that each is constructed from.

Advantages of Metal Roofs Should the Unforeseen Happens.

Non-Combustible Material

Metal roofs are made of non-combustible materials such as steel. These materials do not ignite when exposed to flames, which is a significant advantage in fire-prone areas.

Embers and Sparks

In wildfires, or the case of homes close together in subdivisions or HOA/POA communities, one of the main ways homes catch fire is through flying embers and sparks. Metal roofs are less likely to catch fire from these embers compared to roofing materials like wood or

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asphalt shingles and acts as a protector for portions of the house underneath.

High Fire Ratings

Many metal roofing products have high fire ratings, indicating their resistance to fire. All Central States metal panels have earned a Class A rating which indicates a flame spread rating somewhere between zero and 25. This rating involves burning materials under controlled conditions and measuring the speed and extent of flame spread. The resulting number is the flame spread index. Materials that earn this high rating do not burn well and are very unlikely to contribute fuel to a fire. They also help slow the spread of fire as metal panels withstand heat better than other products. The zero to 25 rating is the best rating given.

Durability

Metal roofs are durable and long-lasting. They do not degrade as quickly as other materials, such as wood or asphalt, which can become more susceptible to fire as they age and deteriorate.

Low Maintenance

Metal roofs require minimal maintenance, reducing the risk of fire hazards associated with the accumulation of debris or damaged roofing materials.

Quick Cooling

After a fire has passed, metal roofs cool down quickly, reducing the risk of re-ignition caused by lingering embers.

Roofing System

It's important to note that a roofing system involves more than just the material itself. Proper installation and the use of fire-resistant underlayment and flashing are critical for maximizing fire resistance.

While metal roofs offer excellent fire resistance, it's important to remember that no roofing material is completely fireproof. The overall fire safety of a home also depends on other factors like the design of the house, the presence of firebreaks, defensible space, and the maintenance of the property.

When considering a metal roof for fire resistance, it's essential to check local building codes and regulations. Some areas with a high risk of wildfires may have specific requirements for roofing materials and construction practices to enhance fire safety.

Learn more about [quality Central States metal panels](#) and how they help protect your family or business.

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ARCHITECTURE METAL ROOFING

Which Home Types Look Best with a Metal Roof?

April 16, 2021 / by RPS Metal Roofing & Siding / 0



There are many reasons why homeowners choose metal roofs for their homes. They have the aesthetic appeal that many people are looking for, but they also offer great benefits in terms of conserving energy and weather-resistance, which is a huge bonus for many.

The fact that metal roofs last for so long and are so durable is another reason why they represent a great investment for your home. One concern you might have before you go ahead and have one of these roofs installed is whether they will suit the particular style of your home.

You, no doubt, want your home to look just right, and you don't want the style of your architecture to be ruined. They're more versatile than you might think, and here's more about the home types that look best with a metal roof.

Victorian Homes

Victorian homes tend to have very elaborate and ostentatious designs, and that actually makes them ideal candidates for metal roofs. Metal panels can be used to create the roofing for towers, dormers, turrets and whatever other design elements your Victorian home might incorporate.

Mediterranean Homes

As you might already know, most Mediterranean style homes use roof tiles to create their distinctive style. But metal roofs can replicate the appearance of roof tiles in many instances when the right approach is taken. They're a great option for Spanish revival homes and other similar architectural structures.

Mid-Century Homes

Mid-century or modernist homes are associated with clean lines and simplicity, and this makes them ideal for the simplicity that can come with the right choice of metal roof. These types of roofs can be highly minimalist and deliver the clean lines and cleanliness that so many mid-century homes are known for.

Colonial Homes

Colonial homes have a very distinctive and easy to spot style to them. They usually have quite high sloping roofs, and they tend to be a little darker. This makes them ideal for painted metal roof panels that come in darker tones. They can replicate this style very well and deliver the aesthetic that you're looking for.

Log Homes

Log homes are, of course, associated with a certain coziness that comes from their wood design. And that's why metal roofs might not seem like an obvious choice for them. But that's not necessarily true. You can balance the wood paneling with the metal panel roof very well, while keeping the home safe and low maintenance at the same time.

Craftsman Homes

Craftsman homes are homey, classic and yet contemporary at the same time. So it's no wonder they're so appealing to so many American families. With the right choice of color, metal roofs can look great on these homes. Deep greys and other earthy tones work well here.

Metal roofs can suit just about any kind of property. You might be surprised by the sheer range of properties that look good with metal roofs, but it just goes to show how much versatility and range there to these kinds of roofs, so don't assume a metal roof isn't going to suit your home.



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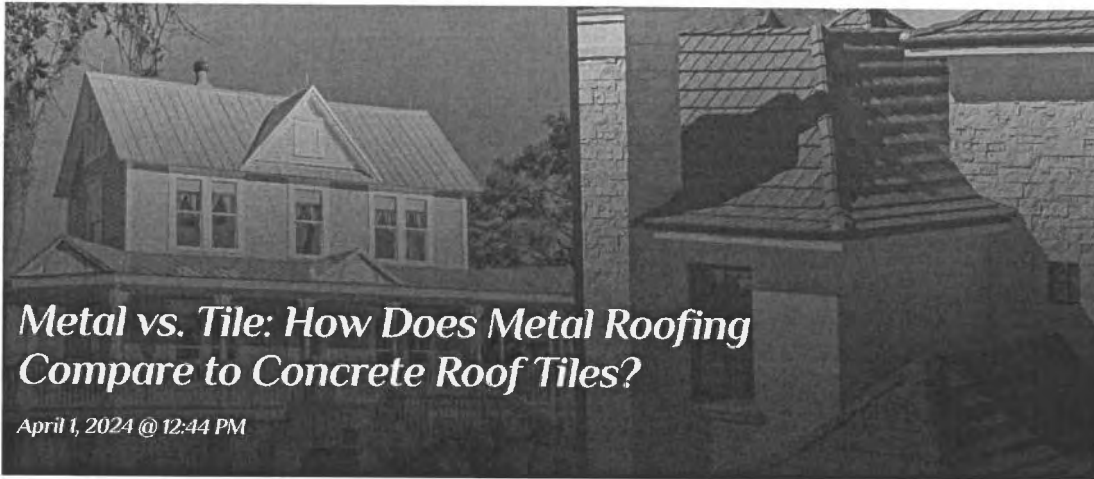
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Posted in: [Concrete Roof Tile vs. Other Roofing Materials](#)

Recently a new roofing trend has been sweeping the exterior design world: metal. While metal has been used for interior or exterior accents in the past, now metal is being used more and more for roofs on both residential and commercial structures. But how does it stack up against concrete roof tiles? Let's compare the design, structure and energy efficiency of both products.

Research and Referrals

Concrete roof tiles have been around for centuries, so there is no doubt they will stand the test of time while creating amazingly diverse looks that allow for unlimited design opportunities. Revel in the freedom of choosing between different profiles – from big barrel tiles or smooth, flat surfaces to surfaces that have a bit more dimension, texture and character to them. Better yet, let's talk about color! From stunning ranges to beautiful blends, Eagle concrete roof tiles are available in varying colors that'll effortlessly heighten any aesthetic. The design possibilities are endless when looking at color schemes, accents or the texture of a structure's crown. Overall, these details can transform the entire exterior from contemporary to modern at the drop of a dime.

Metal, while beautiful in its own right, has a few more limitations. The industry itself has come a long way in offering various textures and finishes to offset the traditional industrial, flat appearance that it is well known for. Metal roofs can now mimic other roofing materials such as wood shake, asphalt shingles and slate, however the metallic look often compromises the authenticity of these renditions and the overall design. In addition, the color offering of most metal roofing manufacturers is often not as diverse as what you would find in concrete roof tile, thus not allowing homeowners or designers much leeway when it comes to exterior design.



Structure

How a product is made is important with any purchase, but it is especially vital when choosing what roofing material to use. A few things to consider when choosing roofing materials are longevity, resistance and maintenance.

Longevity & Resistance

A concrete tile roof provides the added security and protection homeowners are seeking. Eagle roof tiles last the life of the structure and have a proven track record against the harshest conditions. A properly installed concrete tile roof will withstand the elements of rain, snow, high wind and scorching heat – outperforming all other roofing products.

Metal roofs, on the other hand, are known to last about 30-45 years. Since metal doesn't burn and is noncombustible, they're given a Class A fire rating (the most flame-resistant classification). However, metal roofs are affected by environmental conditions and depending on the geographical location, the surface of a metal roof can begin to deteriorate and rust with minimal exposure to moisture, salt, etc. Some painted metal roof finishes can peel, chip, fade, scratch or chalk. Metal roofs can also be a nuisance in inclement weather – hailstorms in particular. During a hailstorm, a metal roof will become boisterous, dented and scratched, leaving it unattractive and the damage caused will be uncovered by most property insurance. In areas with high temperatures, keep in mind that metal is prone to expand and contract, which can lead to oil canning and leave the roof without an air-tight seal – allowing water to infiltrate the expensive roofing system and/or cause a wavy effect.

Maintenance



almost impossible to find a match for a repair, which metal roofs are notorious for being difficult and very expensive to fix. The reason behind this is because the entire sheet of metal would need to be completely swapped out and replaced with a new one. Since concrete roof tiles come in a variety of different shades and colors, it's typically very simple to find a piece or set that matches the existing color of a weathering roof tile. Furthermore, depending on how many roof tiles need to be replaced, it can be virtually painless to repair concrete roof tiles in both labor and material costs.

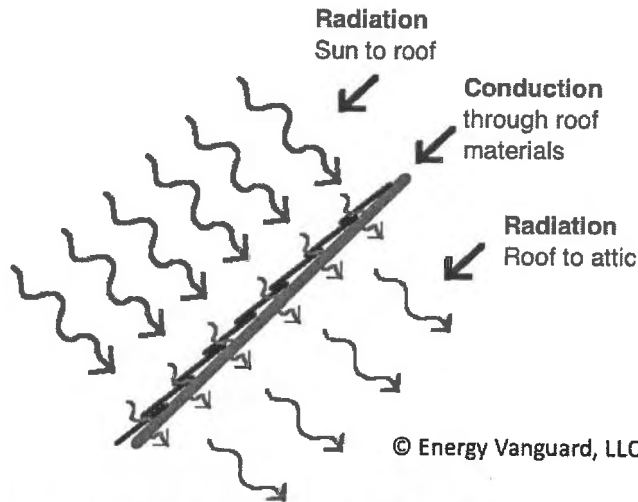
Energy Efficiency

Metal and concrete roof tiles both have advantages when it comes to energy efficiency. An important factor of energy efficiency is how the material's reflectance level will affect your heating and cooling cost.

Heating and Cooling

Using a reflective roofing material is important to most homeowners. While concrete roof tiles and metal roofs both have an amazing reflective quality, one still remains superior. When we start thinking about the sun's rays and how they heat up a rooftop, we have to consider how conduction plays a part in moving the heat from the top of the roof to inside the attic. Depending on the thickness of the roofing material, the sun's heat will radiate onto the roof, conduct, make its way through the material, to then radiate into your attic space creating a hotter atmosphere within the structure.

Attic Heat Gain without radiant barrier



How heat moves through roof material

Using a thicker roofing product will allow the heat being transferred to slowly move through the product. Concrete roof tiles are thick and have a unique advantage; they can reflect *and* absorb the heat before it gets a chance to make its way into the attic. Metal, on the contrary, is very thin. While it remains a highly reflective roofing material, it also transfers a greater amount of heat into a structure's attic, when compared to concrete roof tiles.

These key points on how metal roofs compare to concrete roof tile in design, structure and energy efficiency will allow you to make an informed decision on what roofing material will work best on your next project. To learn more about the features and benefits of concrete roof tiles, visit our [website](#) or [contact](#) your local Eagle Account representative for more information.



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Pros of Metal Roofs 

Cons of Metal Roofs 

Our Recommendation

FAQ About Metal Roofs

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Pros and Cons of Metal Roofs (2024 Guide)

 Written by [Angela Bunt](#)

Updated 06/19/2024

If your shingles are showing their age or the roof has sprung a leak one too many times, it may be time for an upgrade. As you research roof replacement options, you'll learn that [metal roofing](#) has grown in popularity over the last decade.

Metal roofs offer some compelling advantages over traditional roofing materials, including a unique blend of style and durability. But are they worth the investment? We'll break down the pros and cons of metal roofs to help you make an informed decision.

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What Are The Benefits of Metal Roofs?

They may not have been on your radar when you first realized you needed to replace your roof, but metal roofs can be a practical and cost-effective option. The benefits of metal roofs often outweigh their disadvantages. We've listed a few of their most impressive features below.

Does Metal Roofing Last Longer?

One key difference between shingles and metal roofs is their life spans. A traditional asphalt roof with three-tab shingles might last 15–20 years, while architectural asphalt shingles typically max out at 30–50 years. Regardless of the type of shingles you choose, replacing an asphalt roof is troublesome, noisy, and expensive.

Installing a metal roof may be just as noisy and disruptive, but you won't need to replace it as often. A metal roof could last 40–80 years or longer, making it a worthwhile investment.

To learn more about how the longevity of metal roofs compares to other popular roofing materials, check out the video below. General contractor Tom Silva provides a quick overview of asphalt shingles versus wood shingles, metal roofing, and clay tiles:

Comparing Roofing Materials | Ask This Old House



Are Metal Roofs Durable?

Metal roofs are made of strong metals, including tin, aluminum, zinc, copper, and steel. They're more durable than asphalt shingles, so they have longer life spans.

Metal roofs can withstand extreme weather, such as heavy snow and radiant summer heat, and winds of up to 140 mph. They are sturdy—especially the steel ones, which score on the higher end of hardness scales. Most metal roofs have a Class 4 impact resistance rating, meaning they can withstand hail up to 2 inches in diameter.

Do Metal Roofs Increase Curb Appeal?

Metal roofs have come a long way since their tin-plated iron predecessors. Roofers didn't always consider curb appeal, but metal roofs are much more attractive today. A metal roof system also maintains its visual appeal well. Because it sustains minimal damage, your roof will look new for years to come.

There are several metal roofing styles and they span a variety of colors and types. If standard metal shingles aren't your style, you have several other options to choose from including shake-inspired, tile, panel, and ribbed metal roofing.

Are Metal Roofs Sustainable?

Asphalt shingles create a lot of waste, with over 12 billion square feet of shingles ending up in landfills every year. Metal roofs offer a more eco-friendly option. A roofer can install them directly over your existing roof, eliminating the debris associated with a traditional roof replacement. Metal roofs also consist of 35–95% recycled materials and are 100% recyclable if you need to swap them out.

Are Metal Roofs Energy Efficient?

Metal roofs are a good option if you want to save on energy bills. Traditional shingles trap solar heat and increase the need to cool your home by up to 15%. Metal roofs reflect the hot sun, so you don't need to spend as much on your home's cooling costs.

You'll also spend less on heating bills because most roofing companies insulate under metal roofs, keeping your home warmer in the winter. **Metal roofs improve your energy savings by approximately 10–25%.** You can also install solar panels on metal rooftops, making them even more energy efficient.

Are Metal Roofs Safe?

It's a common misconception that metal roofs are more likely to have issues during extreme weather. Metal roofs don't attract lightning during a thunderstorm any more than traditional asphalt roofs. Plus, most metal roofs have a Class A fire rating, meaning they resist surface flame spread. These roofs are as safe as asphalt shingles, even if you live in an area with a high wildfire risk.

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What Are the Drawbacks of Metal Roofs?

Metal roofing comes with a few disadvantages that may turn off some homeowners, especially those on strict budgets.

Are Metal Roofs Expensive?

Metal roofs are more expensive than shingles. Most new roof installations cost \$5,582–\$13,022, with the average hovering around \$9,300. A traditional asphalt shingle roof costs an average of \$8,800. Factors such as the roof's size, the type you install, and the roof's pitch will determine how much you pay. Using expensive materials such as clay tile, slate, or synthetic wood shakes could drive the price above \$30,000.

The cost of a metal roof is typically **\$5,670–\$17,350**, but you could pay **\$40,000 or more** for copper or other high-end metals. A metal roof may cost you less overall, but the upfront costs can be intimidating.*

**Cost data sourced from contractor estimates used by Angi.*

Can Metal Roofs Dent?

Although metal roofs are sturdy, they can still experience damage. Steel roofs are strong and don't get many indentations, but aluminum and copper are prone to issues. Hailstorms and falling tree branches increase the likelihood of dents and could also cause paint finishes to chip or fade. As you're reviewing options, check the warranties to learn what different roof companies cover.

Are Metal Roofs Noisy?

You'll likely hear noise from your metal roof during a storm. Although some people find the sound of rain hitting a metal roof calming, this is something to consider, especially if you're sensitive to certain noises. An experienced roofer will know how to reduce noise effectively by installing the proper underlayment or insulation to minimize sound.

Will Metal Roofing Rust?

Some types of metal roofing are prone to rust, especially when placed in coastal climates. Here's how different materials hold up:

- **Steel** can rust, but roofing companies use galvanized steel to offset the chance of rusting.
- **Aluminum** is rust-resistant but may not be suitable for some residential homes because of its aesthetics.
- **Copper** is also rust-resistant but more prone to corrosion over time.
- **Zinc** resists both rust and corrosion but can be expensive.
- **Galvalume steel** is reinforced with aluminum and zinc, making it the best solution for rusting roofs in humid climates.

Are Metal Roofs Widely Available?

Metal roofs are growing in popularity, but it can still be difficult to find roofers who know how to install them properly. Make sure to do your research before hiring a contractor to install a metal roof.

Quick Tip

Make sure that your roofer has metal roof installation experience, proper insurance and licensing, and a history of positive reviews. For added peace of mind, you can hire an independent roof inspector to evaluate your roof before and after installation.

Are Metal Roofs Worth The Cost?

Metal roofs are an attractive and durable roofing option compared to traditional asphalt shingles. Although a metal roof's upfront cost is high, the cost of a new roof is always expensive. Due to its endurance, you'll save money in the long run if you choose to go with a metal roof. We recommend going with steel roofing over tin or aluminum to get the most longevity out of your roof and considering Galvalume steel if you live in a coastal region.

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FAQs About Metal Roofs

Do metal roofs attract lightning?

Researchers haven't found any evidence that metal roofs attract more lightning than asphalt alternatives. Properly grounded metal roofs can conduct lightning energy over a broader area, reducing the risk of damage or fire.

Do metal roofs leak more than shingles?

What is better, a metal roof or shingles?

Is it worth it to put on a metal roof?

Does a metal roof devalue a house?

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What is the Lightest Roofing Material?

By [Trevor Underwood](#) April 18, 2022

CONTRACTORS

WHAT IS METAL ROOFING

WHY METAL ROOFING



▶ What is the Lightest Roofing Material? ◆ 6:33

Metal roofs are one of the most durable, long-lasting and energy-efficient roofing materials on the market, but the lightweight advantages of metal roofs are often overlooked.

Many homeowners are surprised to learn that metal roofs are one of the lightest roofing materials, especially since metal roofs last two to three times longer than traditional roofing materials. Some quick stats:

- **Asphalt Shingles:** Weigh up to 4.3 lbs. per square foot
- **Clay or Concrete Tile:** Weigh up to 6 -11 lbs. per square foot

Roofing Materials by Weight



Here's how a lightweight metal roof eases the burden not only on a building structure, but also roofing contractors and homeowners.

Why does the weight of the roof matter?

Shear strength is the ability to resist forces that cause the internal structure to slide against itself. For example, in a reinforced concrete beam, the main purpose of the reinforcing bar (rebar) is to increase the shear strength. In roofing, the forces pushing on the structure are typically caused by hurricanes, tornadoes, earthquakes and severe storms. A building bearing an excessively heavy roof load is considered top-heavy and prone to side forces.

Metal roofs contribute reinforcing shear strength to the underlying roof deck without piling on excess weight at the top of the building envelope where it is the least desirable. This is extremely advantageous for both contractors and homeowners for several reasons.

weight of the roof.

A **roof-over** is when a layer of new roofing is placed over the existing roof. A **roof replacement** is when the existing roofing and underlayments are completely removed from the roof, exposing the deck.

Heavy roofing materials pile excessive weight up at the top of the home, adding to the roof load and the construction materials required to support it. For instance, asphalt shingles can add another 15,000 pounds (on a 30 square roof) to the roof and are too heavy to be considered a viable option for a roof-over. Clay tiles are also ruled out since they can absorb up to 15% of their weight in moisture, adding weight stress to the supporting roof structure.

On the other hand, lightweight metal roofing contributes reinforcing strength to the roof deck, while weighing only 4,500 pounds (on a 30 square roof), and can often eliminate the need for a complete tear-off of the existing roof (*aka a roof replacement*).

In fact, if local building codes permit, metal roofs can be installed directly over an existing roof while still remaining well within the “dead load” limits of the local building codes (dead load refers to the weight of the roof structure, plus any permanently attached structures).

>>>Related Resource: *Here's what you need to know about roof-over vs. roof replacement.*

For new construction, a lightweight metal roof design can keep a new home or building project on time and even under budget. New homes designed with metal roofing can

...simplifies and reduces the amount of load-bearing engineering required to support the roof.

The inherent lightweight nature of metal makes it ideal for roofing since it simplifies engineering and contributes sheer strength to support the entire structure, but the benefits of lightweight metal roofing extend beyond just construction.

Benefits of Lightweight Metal Roofing

Regardless of what region you are in, a lightweight and element-resistant roof has the strength to protect your home from nearly anything Mother Nature has to offer with surplus strength to support:

- **Snow Loads**: Homeowners in snow-prone regions require a roof with surplus strength to accommodate the weight of heavy snow and ice.
- **Solar Power**: Roof-mounted installations, such as solar power panels and racks, require surplus strength.
- **Earthquakes**: Lightweight DECRA stone-coated steel provides extra shear strength to the roof deck to withstand tremors in seismically active regions like Costa Rica. Conventional materials, such as heavy asphalt shingles and clay tiles only add dead weight, resulting in a top-heavy home with minimal extra roof reinforcement.

As one of the strongest roofing materials on the market, metal roofing comes with an extensive list of other benefits as well, including:

- **Hail**: Highest Class 4 impact rating.

codes in the nation due to the constant landfall from hurricanes. Even if you're not in Florida, look for a roof that meets high-velocity hurricane zone requirements for top-tier protection from wind.

- **Salt Air and Humidity**: Check that the roofing material can resist rust and oxidation in moist and humid salt air environments.

The benefits of metal roofing don't stop there. The durability and energy efficiency of metal roofing provides homeowners with an extremely high ROI and a sustainable roofing product that boasts benefits such as:

- Lasting two to three times longer than traditional roofing materials, such as asphalt shingles.
- Providing energy savings as high as 25%.
- Offering insurance discounts in many states. For example, in Texas, a metal roof can lower your homeowner's insurance by up to 35% (*check with your local insurance carrier for available discounts*).
- Increasing a home's value by up to 6%.
- Producing environmentally-friendly construction that is 100% recyclable.

Lightweight DECRA Metal Roofing

DECRA Metal Roofing has protected homes and buildings since 1957 and our state-of-the-art manufacturing facility is located right here in Corona, California. As the original stone-coated metal roofing manufacturer, DECRA has set the industry's gold standard for durability and longevity.



ROOFING MATERIAL TYPES

Spanish Clay Tile vs. Metal Roofing: Which Roof Material is Best?

Spanish clay tiles and metal are both common roofing materials used on residential, commercial, and architectural properties. Discover the different characteristics of these two materials and how each one can affect your final decision.

By: Julianne Calapa | Posted on August 24, 2022

[Home](#) / [Roofing Material Types](#) / Spanish Clay Tile vs. Metal Roofing: Which Roof Material is Best?

Metal Roofing vs. Spanish Clay Tile: Which Roofing Material is Best?



Let's face it: **Buying and installing a new roof can be expensive**, no matter what material you choose. That's why you should always consider the considerations, pros, cons, and differences of all your buying options before you make a decision.

Two common roofing materials are standing seam metal roofing and Spanish tiles (typically ceramic or made of clay). We often get questions about the distinct differences between these two materials and if one is better than the other.

The shortest answer is: **It depends.**



FINDING A QUALIFIED METAL ROOFING CONTRACTOR

Learn how to find the right metal roofing contractor, establish expectations, and ask all the right questions.

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FINDING A QUALIFIED METAL ROOFING CONTRACTOR
A quick guide to finding a contractor, how to determine their reliability, what to expect during a consultation, and the most important questions to ask.

While our main product category at Sheffield Metals is metal roofing, we 100% understand that metal roofing is not suitable for every home or building owner. That's why we do our best to educate buyers with unbiased facts about the various roofing material choices.

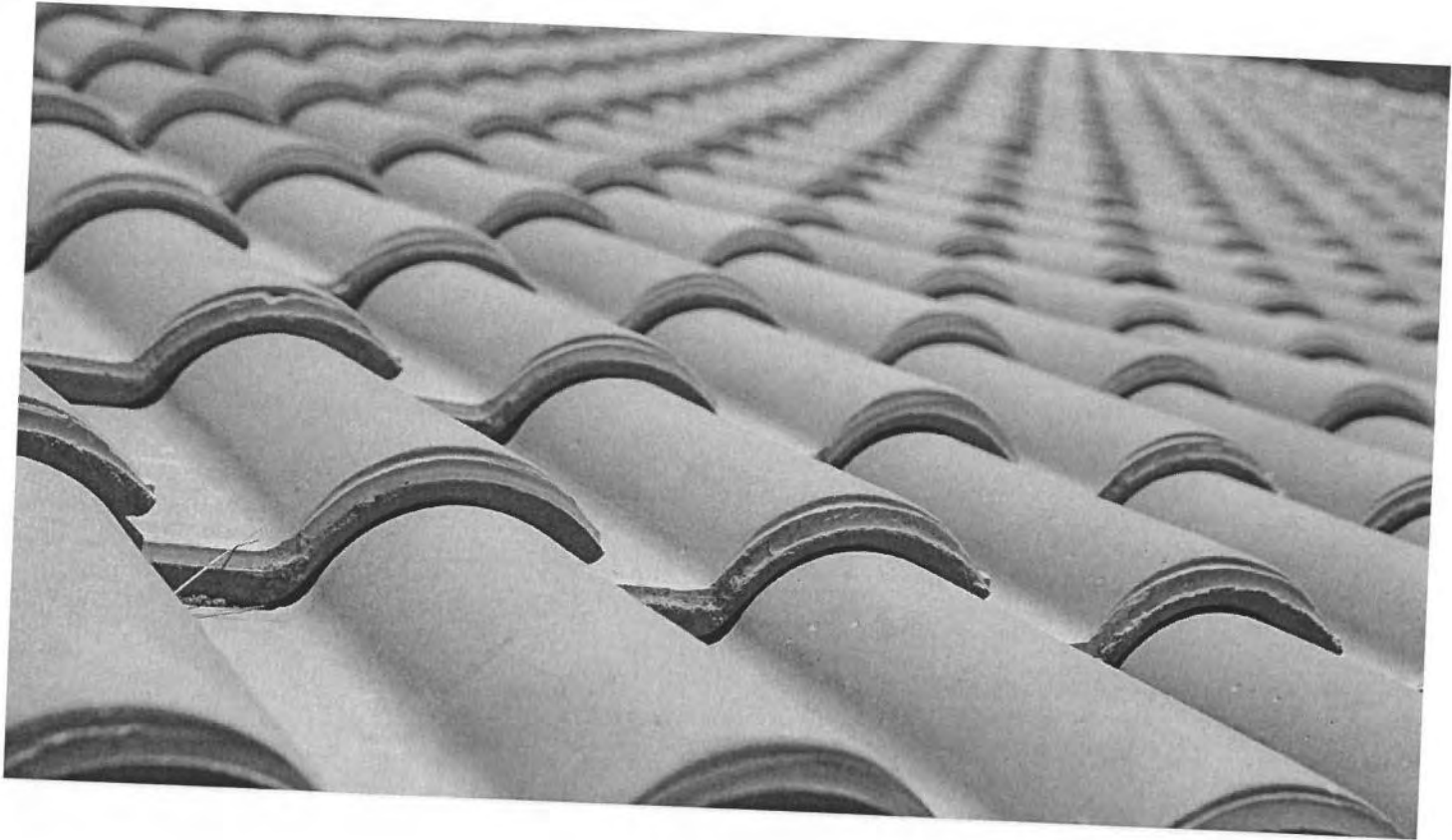
In this article, expect to learn:

Advantages and disadvantages of Spanish tiles

Advantages and disadvantages of metal roofing

The different factors you should consider before making a purchase

Spanish Clay Tiles – Characteristics, Advantages, & Disadvantages



The practice of using clay tile as a roofing material has been around for centuries, with some uses dating back to China as early as 10,000 B.C. Using clay roof tiles eventually spread throughout Asia and Europe, where new styles and advanced options became available (including what would eventually be coined as “Spanish tiles”). This building material finally made its way to America during colonization in the 17th century and is still used as a roofing material.

Advantages of Spanish Clay Tiles

Longevity – One of the most significant reasons home and property owners install a Spanish tile roof is that it has been known to last decades. There are some instances where clay tile roofs have been structurally sound for over 100 years. Determining the exact number of years a roof will last is challenging, but limited extreme weather exposure and proper maintenance help to prolong the life of a Spanish tile roof. With certain manufacturers, a clay tile roof system may come with the option for up to a 50-year warranty.

Reduced heat transfer – Spanish clay tile is one of the most preferred roofing materials if you live in an area where heat transfer into a building is a concern. According to the **Tile Roofing Industry Alliance**, “roofing tiles have a natural thermal resistance in the raw materials themselves that are created by the larger cross-sectional areas of the tiles while installed.” Also, because Spanish tiles are installed individually instead of in an overlapping style, the air space around the tiles creates natural ventilation that acts as a barrier to heat transfer. This allows indoor building temperatures to stay cooler in the summer and warmer in the winter.



Specific architectural look – The overall “look” of your property (and neighborhood) is a variable you should consider. Specifically, Spanish tiles tend to stand out with their terra cotta, brown earth

tones, and rustic red color palette. You'll notice that most buildings with Spanish clay tiles are concentrated in some areas of the United States. The traditional "S" style Spanish clay tiles tend to complement the Mediterranean and Spanish architectural influences popular in places such as **Florida, Georgia, the Southwest U.S., and Southern California**. So if you're located in a New England or Pacific Northwest region, Spanish tile might not go with the area's architectural style.

Eco-friendly – As mentioned, most Spanish tiles are made from clay (or terra cotta clay), a regenerating natural element found on the Earth that is not in danger of depletion. Most clay tiles are made without chemicals or other hazardous materials. Additionally, Spanish tiles can easily be recycled and ground up for use in future items.

High fire resistance – Like metal roofing, clay tiles often carry a Class A fire rating (UL 790 – **Standard Test Methods for Fire Tests of Roof Coverings**), meaning it's least likely to combust or catch fire.

Lower maintenance & easy replacement – Spanish tiles do not require frequent maintenance. For the most proactive approach, it's recommended that Spanish tiles are inspected one to two times (by a professional) per year to look for:

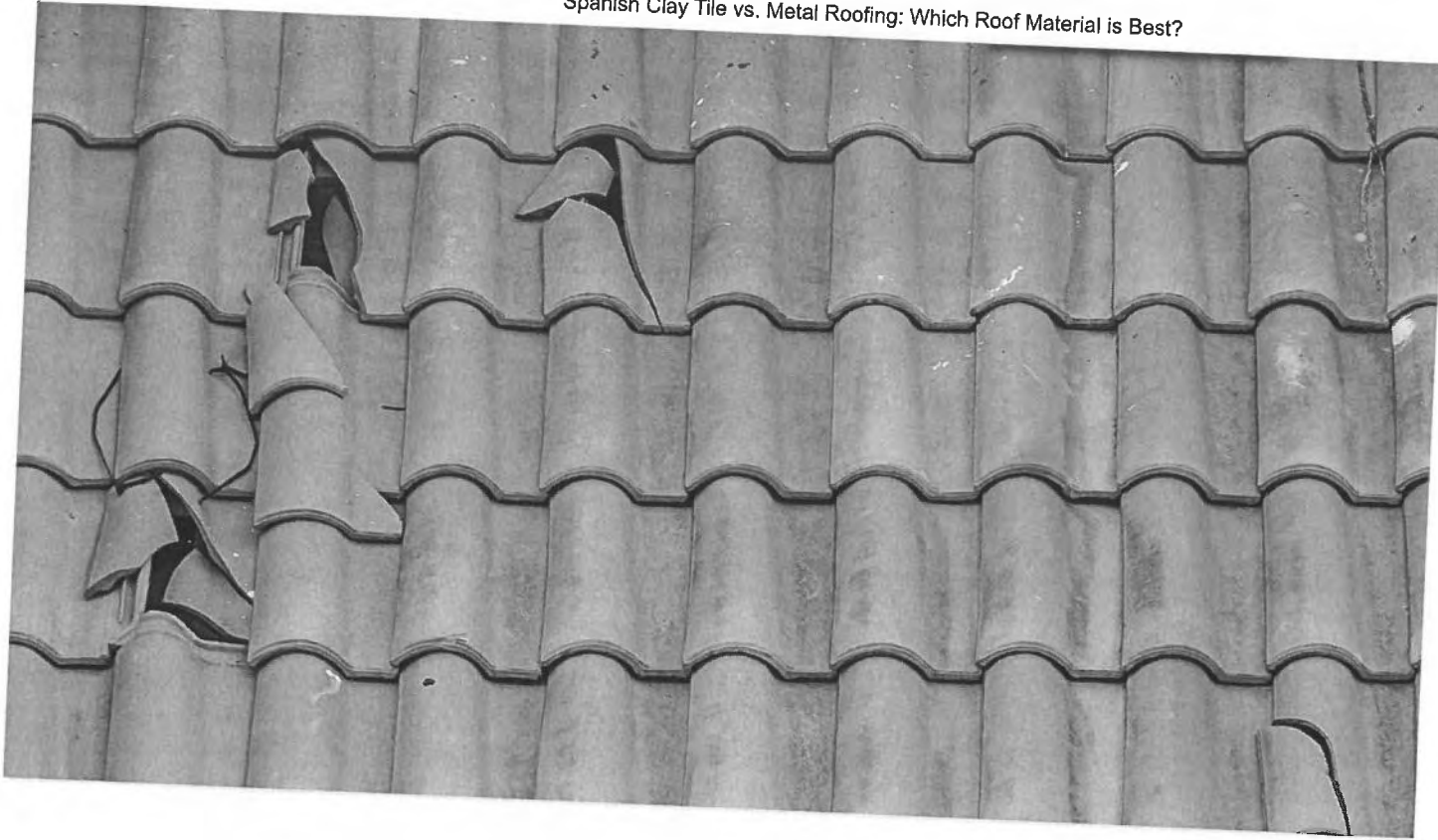
Leaks and water damage

Leaves, branches, and other stuck debris

Cracked or damaged tiles

Birds and other animals

Luckily, if there are one or more tiles that need replacement, you don't need to rip up an entire section of your roof. The damaged Spanish tiles can be removed and replaced with relative ease.



Disadvantages of Spanish Clay Tiles

Fragile – One of the most significant disadvantages to Spanish tiles is their fragility — especially when met with enough force — which makes them easier to chip, crack, and fall apart. This comes into play at all points of a roof's lifecycle:

Pre-installation – Contractors have to make sure the clay tiles they're installing haven't been broken during transport or by the handling of workers.

During the installation – Since clay tiles are installed using screws that go through the holes in the material, it's not hard to break the clay with the wrong amount of force or tension when attaching the fastener.

After the installation – If a clay tile roof is left undisturbed, it can last for 100+ years. However, if someone walks incorrectly on the clay tiles or if a large enough object (branch, etc.) hits the surface, clay tiles can break relatively easily.

Additionally, cold temperatures and repeated freezing and thawing can weaken Spanish clay tiles, which is why this roof type is most common in warmer climates.

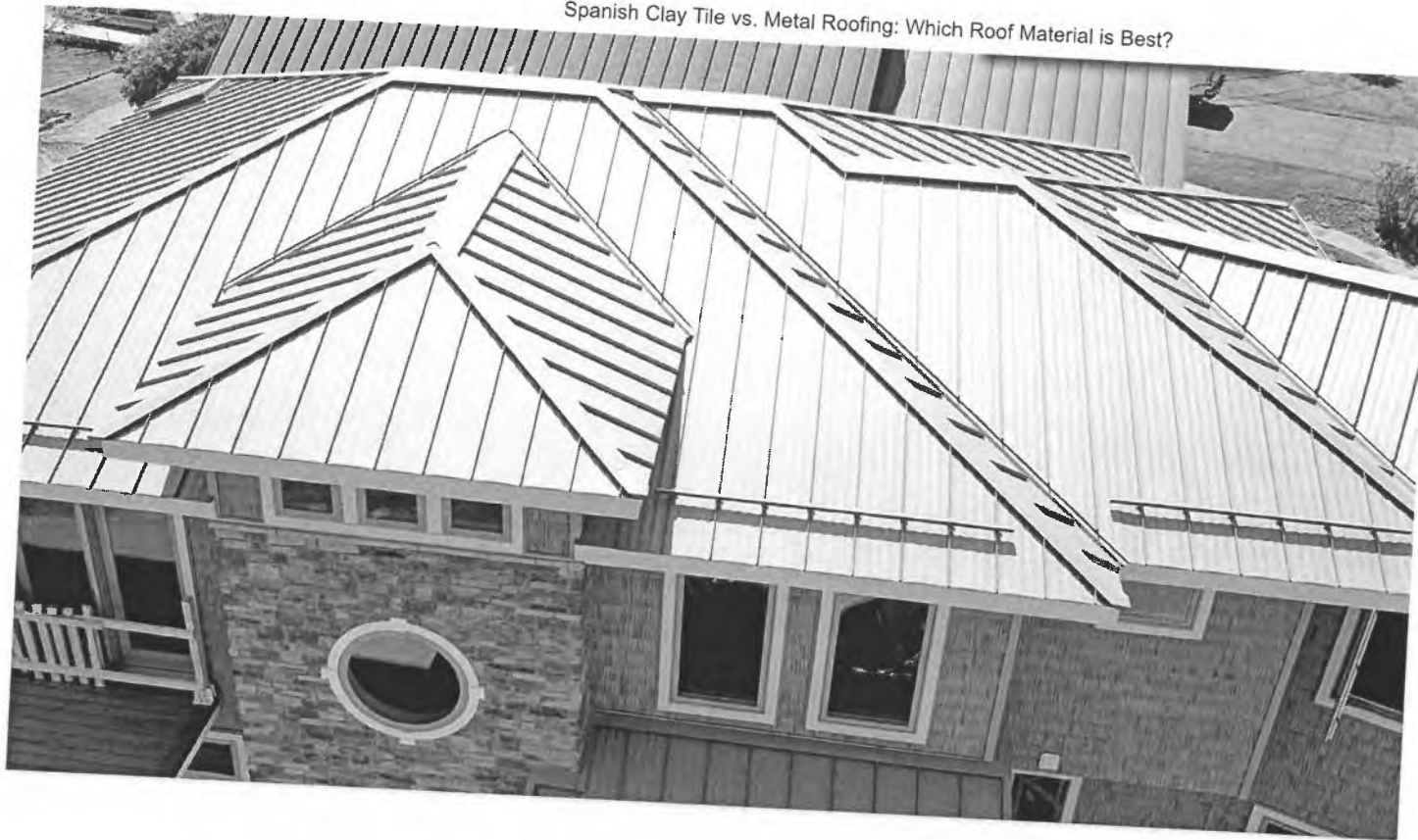
Higher cost than metal roofing – As far as pricing goes, installing Spanish tiles is not a cheap venture. **According to Modernize**, the materials are not the expensive part, it's the installation that costs more because it tends to be time-consuming (especially if the "S" style tiles are smaller). On average, the overall cost to install Spanish clay tiles ranges anywhere from \$13 to \$25 per square foot.

Heavy – Clay roof tiles are some of the heaviest materials you can install on your roof. Depending on the style and size, Spanish clay tiles can weigh anywhere from 8 to 15 pounds per square foot. This is partially a good thing, as the heavier the material, the harder it is for it to be lifted off of the roof deck. However, it tends to be more negative because the added weight puts more of a strain on the building structure. That's why it's critical to ensure the building frame can withstand the extra weight and your roof deck is strong enough to support the roof.

Strict slope requirements – For a Spanish clay tile to be able to drain water adequately, the absolute minimum slope is 2.5/12. For a 2.5/12 up to a 4/12 pitched roof, it's recommended that you use two **layers of underlayment** to ensure water doesn't leak through. For 4/12 slopes and higher, which is considered a steep slope for clay tiles, only one layer of underlayment is necessary.

Limited color options – Spanish tiles are most commonly known for their reddish-orange color, which is made of either clay or terracotta. While the red/orange color does fit with some architectural looks, it's not suitable for every building or homeowner, which may or may not be a drawback. However, specialty colors are available upon request, including blues, greens, blacks, or whites, but you will have to pay a higher price for the coated tiles. However, if you want the colors available for metal roofing, you can choose metal tiles with the same look as Spanish clay tiles.

Standing Seam Metal Roofing – Characteristics, Advantages, & Disadvantages



The use of metal as a roofing material has been around for centuries and has origins dating back to the 3rd century B.C. in Sri Lanka. The use of metal roofing (typically lead or copper) rose to prominence in the 17th century and eventually made its way to the United States in the early 1800s. Advancements over time added iron, **steel**, **aluminum**, and zinc as proper metal roof options. Today, various metal roof styles are used all over the country, as metal roofing is one of the best choices for residential, commercial, architectural, and structural properties.

Advantages of Metal Roofing

Longevity – Metal roofs can last decades, and most manufacturers promise a life span of 40+ years for most Galvalume and aluminum roofs. This is especially true if it's installed correctly and properly maintained over the years. On the other hand, some **metal materials**, such as copper and zinc, have even been known to last 100 or more years.

Lightweight – Metal roofing is a more lightweight material than most other roof types, but it's over five times lighter than a clay Spanish tile roof. For reference, a 24-gauge Galvalume (steel) roof

weighs anywhere from 1 to 1.5 pounds per square foot. Or, an .032 aluminum roof weighs less than .5 pounds per square foot.

Durability – When compared to different materials, such as wood, clay, plastic, or glass, metal stands out as the strongest and most resistant to puncturing, breaking apart, and degrading. This comes in handy in several ways, especially if the roof is subject to:

Strong winds – Tornadoes, hurricanes, dust storms, etc.

Falling debris – Sticks, branches, leaves, etc.

Rain and wind-driven rain

Snow, ice, and hail

Mold and mildew

Rodents and other pests

Low slope options – Metal roofing is less strict regarding minimum slope requirements, but still depends on what type of profile is used. For example, snap-lock systems should only be installed on roof pitches of 3/12 and above, unless otherwise approved by the manufacturer. On the other hand, mechanically seamed double-lock metal roof systems are suitable for low-slope applications:

2-inch double lock profile: Often can be installed down to a .5/12 pitch with in-seam sealant (based on geography).

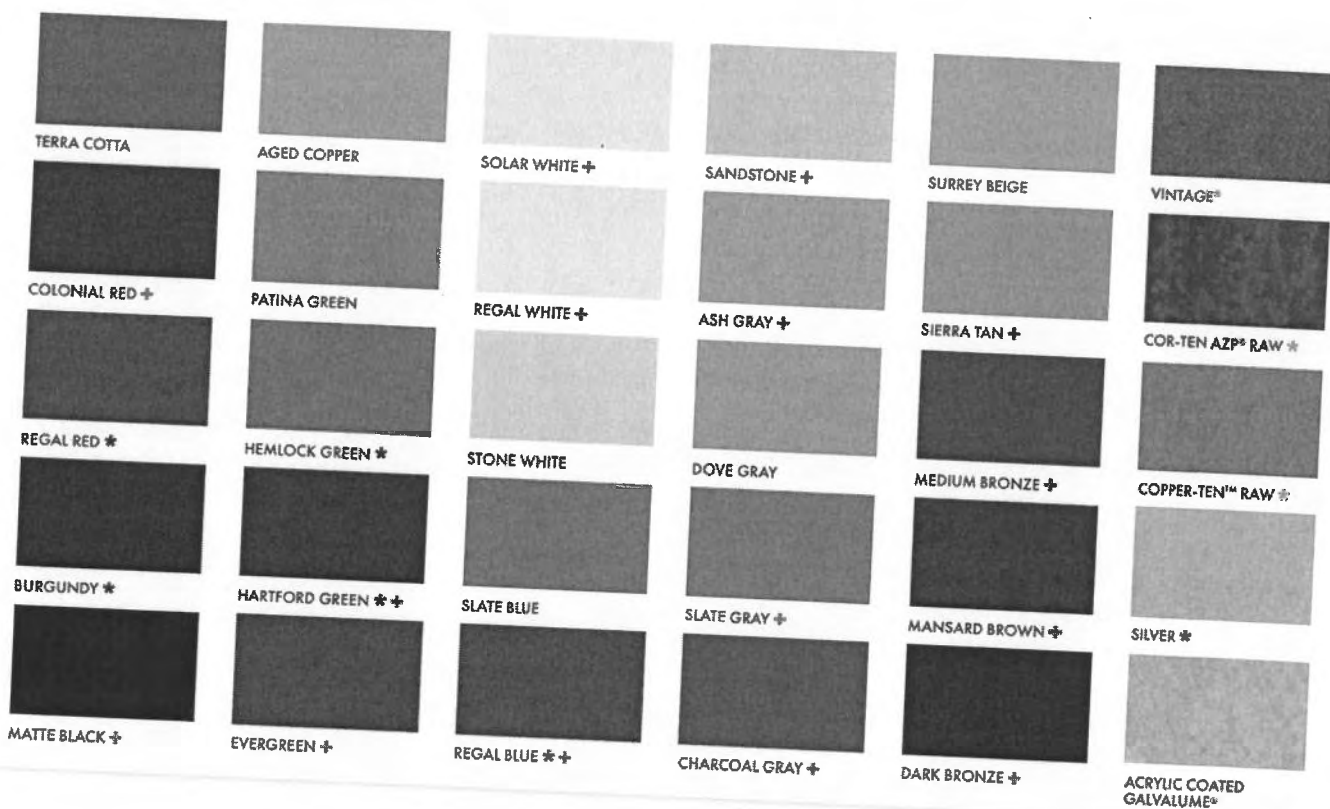
1.5-inch double lock profile: Often can be installed down to a 1/12 pitch with in-seam sealant (based on geography).

Highly recyclable – Metal roofing is 100% recyclable, so any unused/old panels, tear-off metal, and leftover scraps can be recycled for use in future products. On top of that, some coils and sheets used to make metal roofing panels may already contain previously recycled metals. For reference, metal roofing materials can either be **pre-consumer or post-consumer recycled content**:

Pre-consumer recycled materials – Scrap metal content produced during the manufacturing stage that has been recycled for future use.

Post-consumer recycled materials – Excess materials that have already been used by a consumer at one point in time and have been recycled for reuse.

Low maintenance– Compared to other roof types, the required maintenance for a metal roof is generally minimal, especially if the roof was correctly installed. That said, performing maintenance on a metal roof shouldn't be overlooked, as it could make or break a system if a problem exists without your knowledge. For a metal roof, cleaning and surface-level maintenance should be performed about every 18 months, and in-depth structural maintenance about once every two years (usually performed by a trained professional).



Unlimited color choices – Since metal roofing sheets and coils are coated in paint systems from reputable manufacturers, such as Sherwin-Williams, metal roofs can come in any color. If you're looking for a neutral earth tone, a vivid or bright color, or even a textured/metallic finish, manufacturers can custom order any color (for an added cost). Plus, the paint systems used in metal

roofing are tested in real outdoor environments to ensure they will last for decades, which is why many metal roofs are supported with paint warranties.

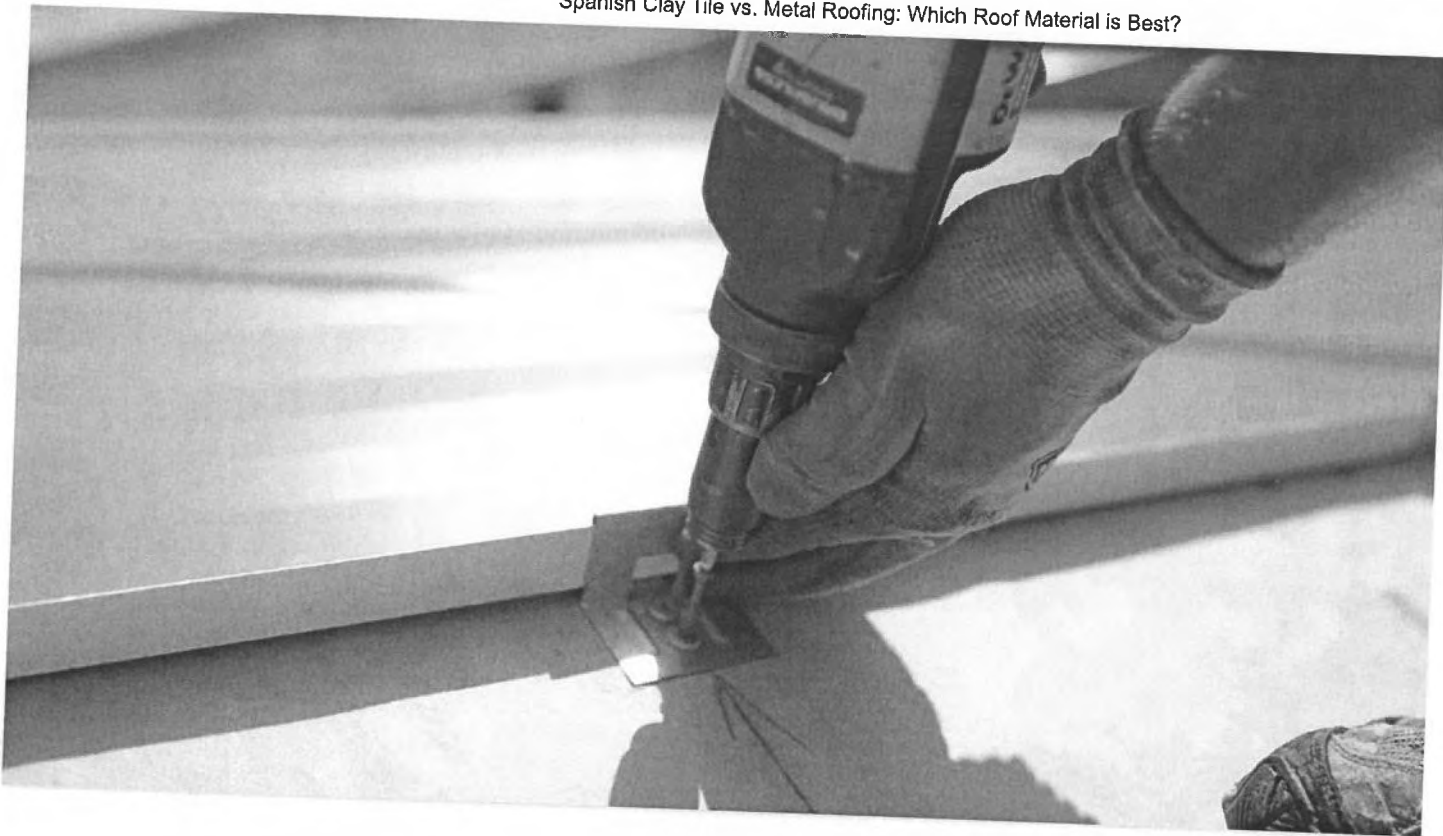
Cool roofing energy savings – The **availability of cool metal roofing**, defined as painted or coated metal products that reflect the sun's energy to dissipate heat, helps reduce the heat transferred into a building or home. This can result in total cooling cost energy savings ranging from 7% to 15%, according to the Green Building Alliance.

High fire resistance – Metal roofing is typically Class A fire-rated and noncombustible, making it the most resistant to catching fire. This is important in regions prone to wildfires because if hot ashes/embers fall onto the surface of a metal roof, it has the highest potential of NOT catching fire.

Disadvantages of Metal Roofing

Mid to high cost, but cheaper than Spanish tile – Much like Spanish tile, metal roofing is not considered a "budget" roof material. The **price of a metal roof** fluctuates depending on where you live, the profile you choose, the color, and a whole other set of considerations. That being said, on average, the cost of a standing seam metal roof system ranges from about \$7.00 to \$15.00 per square foot. So while the cost of a metal roof is more expensive than a shingle roof, a standing seam metal roofing is actually cheaper than a Spanish clay tile roof.

Skilled installers required – Experienced, qualified, and knowledgeable metal roof installers are a critical component of ensuring a metal roof will perform to its high standards. However, since metal roofing requires more refined skills and attention to detail, there are significantly fewer installers capable of correctly installing metal roofing. That's why it's essential to do your research and due diligence to find the best metal roof contractor for you.



Restrictions within HOAs & municipalities – There are communities, Home Owners Associations (HOAs), and historical districts that don't allow metal roofing to be installed on properties within its jurisdiction. In places where it's banned, metal roofing is thought of as looking too "industrial" or goes against the neighborhood's general look.

Oil canning – Oil canning is an inherent characteristic of light-gauge, cold-rolled flat metal products and is described as the perceived waviness in the broad, flat areas of metal panels. While oil canning is only an aesthetic issue and will not affect the integrity of the roof system, some home and property owners see it as unsightly. Luckily, there are **methods to reduce the likelihood that oil canning** will occur.

What to Consider Before Buying Spanish Tile vs. Metal Roofing

Budget

Both metal roofing and Spanish clay tiles are premium roofing materials. Even so, there's a price difference, as standing seam metal roofing will be less expensive. You might want to stick with a metal roof if you have a limited budget. But if you're in a situation where you can splurge on a more expensive roof, Spanish tile might be right.

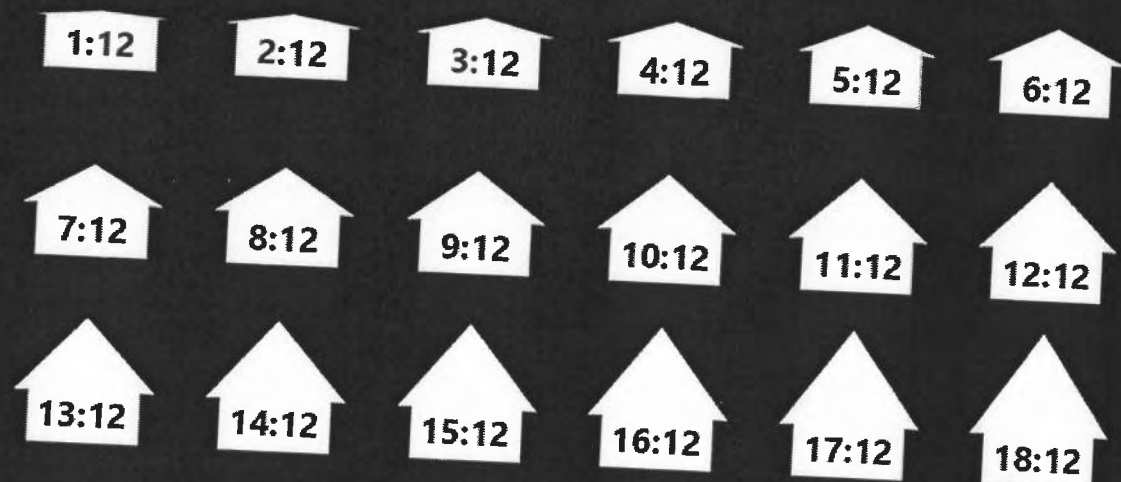
Location & Environment

Spanish tile has distinct locations around the country where it is more prevalent due to the architectural theme of the region. For example, you won't find many Spanish tile roofs in New York or Colorado. But if you go to California or Florida, you will see Spanish tiles everywhere. On the other hand, metal roofing is common in most parts of the U.S., especially in mountainous and coastal environments.

Metal and Spanish tile roofs perform well in **threatening weather environments**, as both often come engineered with passing uplift and water penetration testing standards. If you have questions about specific testing requirements for your location, contact the product manufacturer for assistance.

Your Building/Home Properties

STANDARD ROOF SLOPES



Slope – Spanish tile and metal roofing are not suitable for flat roofs, but there are more strict slope requirements for Spanish clay tile. If your roof slope is 3/12, nearly any type/profile of metal roof can be installed. You can also install a Spanish tile roof on a 3/12, but it requires two layers of underlayment, which will drive up the cost.

Support structure – Spanish clay tile will weigh down your building's frame and support structure because it's nearly 6x to 10x heavier than metal roofing. Knowing what your walls and framing can withstand is imperative to know before you buy.

Heat transfer – In warmer climates, heat transfer is always a concern. Luckily, metal roofing (cool metal roofing, specifically) and Spanish tiles have properties that help reduce the amount of heat transferred into the building.

HOA & municipalities – If you live in a neighborhood where you have an HOA or another municipal group, you should verify that the roof material that you choose is allowed.

Style

When deciding between metal roofing and Spanish tile, it's helpful to know the style you're going for. These two materials have very different looks; metal roofing tends to be a little more modern and sleek, whereas Spanish tile is more traditional and rustic. Additionally, metal roofing comes in more color options because it's painted, which gives you more range to **choose a roof color** that fits what you envision.

Final Thoughts on Metal Roofing vs. Spanish Tile

There are a lot of factors to consider when choosing between metal roofing and Spanish clay tiles.

Luckily, both materials make great roof options. And, if you've read through the advantages, disadvantages, and personal buying considerations outlined above, you'll be more equipped to make the right choice.

As a starting point, ask yourself these questions:

How much money am I comfortable spending on a roof?

Are there skilled and qualified contractors who install these materials in my location?

What roof material is popular on other buildings or homes around me?

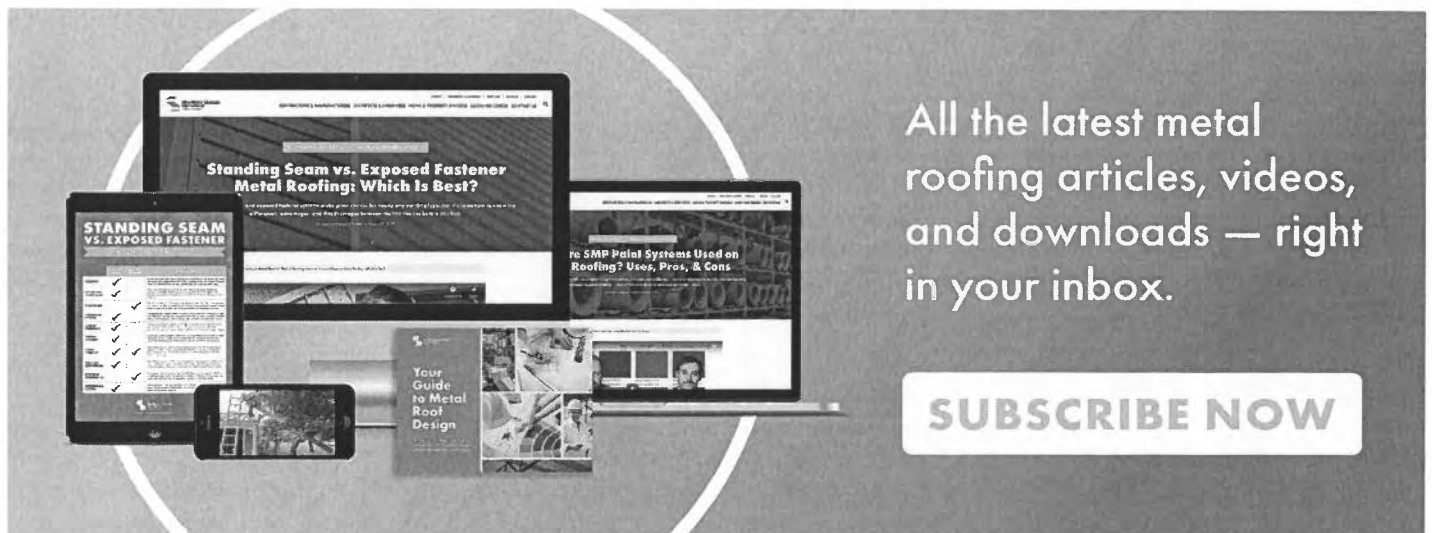
What colors will look good on my roof? What colors do I personally like?

Does my HOA restrict different roofing types?

Will my building structure support a heavier roofing system?

With over 20 years of manufacturing metal roofing products, Sheffield Metals knows it's not always an easy decision to make on your own. Whether you're leaning towards buying a standing seam metal roof, Spanish tile roof, shingle roof, or otherwise, we're here to help make sure you feel confident in choosing the roof that best fits your needs.

To learn more or to ask about selecting a new roof, **contact us today to speak with one of our experienced metal roofing specialists.**



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What Can Cause a Tile Roof to Fail?

If you're a home or building owner looking to install roof tiles onto your structure, you're probably educated on why a tile roof is a good investment. However, it's good to also know what can cause tile roofs to fail prematurely.

A new tile roof can fail prematurely due to the age or integrity of your home structure, poor workmanship, or natural causes.

Tile roofs are popular for many homes due to their visual appeal, durability, and longevity. However, even a tile roof can suffer from wear and tear given the circumstances. From the quality of installation to storm damage, there are several reasons why tile roofs may fail.

By understanding these reasons, homeowners can take the necessary steps to protect their tile roofs and ensure there are no major tile roof problems to face in the future.



How the Age of Your Home Can Impact Tile Roofs

The average lifespan of a tile roof can range from 50 to 100 years or more, but the age of a home can play a significant role in the overall health of a tile roof, and it's

important for homeowners to be aware of how the age of their home can impact their roofing system.

The Degradation of Roofing Materials

As homes age, the roofing materials and systems may degrade, which can impact the performance of tile roofs. Over time, the roofs deck or framing system may weaken, causing it to collapse. Additionally, the roof's flashing system may deteriorate, leading to leaks.

The Importance of Regular Inspections

When it comes to tile roofs, it's important to have a professional roofer inspect your roof regularly to ensure its longevity and performance. This will help you identify and address any issues before they become major problems.

The Suitability of Older Homes for Tile Roofs

It's also important to consider the age of your home when choosing a tile roof. If your home is older, it may not be able to support the weight of a tile roof without significant reinforcement. In this case, asphalt shingles or metal are better options.

A professional roofing contractor can advise you on the best course of action to take, depending on the age of your home.

Poor Workmanship / Lack of Experience

One of the most common consequences of poor workmanship on a tile roof is tiles that are not securely fastened. Improperly fastened tiles can shift or become dislodged during high winds, leaving the roof vulnerable to water damage and leaks.

Improper Flashing Techniques

Another critical aspect of tile roof installation is the flashing, which is the process of reinforcing weak points of the roof and roof to wall terminations to prevent water from making its way into your home.

If the flashing is not installed correctly, water can infiltrate your home, causing damage to the interior. Leaks on tiles roofs can be difficult to detect until significant damage has already been done.

Incorrect Tile Selection and Installation

In addition to proper flashing techniques, the selection and installation of roof tiles is also critical. Roof tiles come in a variety of materials and styles, each with unique characteristics and performance requirements. If the wrong type of tile is used or if the tiles are installed incorrectly, the roof can be vulnerable to damage from wind, rain, and other weather conditions.

Improper Roof Underlayment

Another aspect of tile roof installation that is often overlooked is the roof underlayment. The underlayment acts as a barrier between the roof deck and the tiles, protecting your home from water damage. If the underlayment is not installed correctly, water can penetrate the roof, causing leaks and water damage to the interior of your home.

Quality of Roof Tile & Accessories Used

The quality of roof tiles and accessories used is critical to the longevity of a tile roof. Here are some of the ways that poor-quality roof tiles and accessories can cause a tile roof to fail prematurely:

Poor Quality Roof Tiles

Poor quality roof tiles are more likely to crack, break, or become damaged over time. This can lead to leaks and other problems that can weaken the structure of the roof and cause it to fail prematurely. A tile roof repair may cause more damage as roofing contractors will

Flashing and Accessories Failure

Low-quality flashing installed at the roof edge or wall terminations can result in your tile roof allowing water to infiltrate your home and cause other damages to the structure. Poor quality underlayment may shift or deteriorate prematurely.

Weather Resistance

Quality roof tiles and accessories should be designed to withstand extreme weather conditions, such as heavy rain, strong winds, and UV radiation. If the roof tiles or accessories are of low quality and not designed to withstand these conditions, they are more likely to become damaged, which can result in leaks and other problems.

Poor Manufacturing Process

If the manufacturing process for roof tiles and accessories is not rigorous, with quality control measures in place, there is a higher risk of defects, such as cracks, which can lead to failure over time.

What Makes a High-Quality Roofing Tile?

It's important to note that not all roof tiles are created equal. It's essential to choose tiles that are manufactured to industry standards and made from premium materials to ensure that they perform well over the long term and provide the desired level of quality and durability.

- Clay roof tiles are naturally strong and durable, and high-quality clay tiles are resistant to weathering and UV damage, ensuring long-lasting performance.
- Concrete roof tiles are known for their strength and durability, and high-quality concrete tiles are designed to withstand harsh weather conditions, including heavy rain and high winds.

Foot Traffic on Tile Roofs

One often overlooked factor is foot traffic on the roof. An excessive amount of foot traffic on a tile roof can lead to shifting or cracked tiles.

Cracked Tiles

Walking on a roof tiles can cause the tiles to crack or chip, which can weaken the structure of the roof and create opportunities for water to penetrate and cause damage. The chips and cracks can also create weak points in the roof, making it more susceptible to damage from extreme weather conditions.

Shifting Tiles

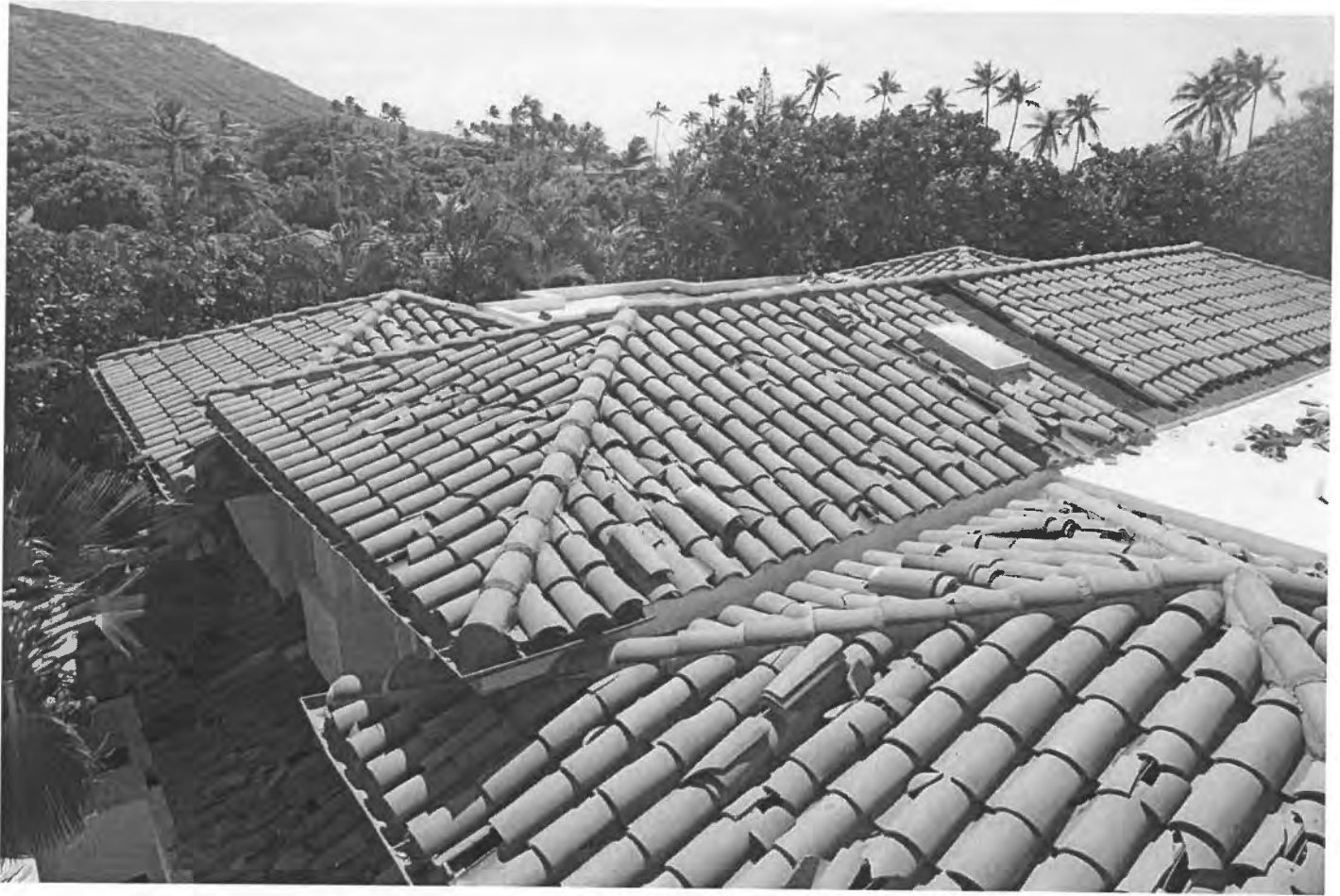
Foot traffic can cause roofing tiles to become loose or dislodged, which can result in leaks and other problems. This can happen because the movement and pressure from walking on the tiles can cause them to shift or become detached from the roofs decking.

Damaged Underlayment

The underlayment is a critical component of tile roofs, as it provides an extra layer of protection between the roof deck and the tiles. Foot traffic can cause the underlayment to become damaged or punctured, which can result in water infiltration and other problems. This can weaken the structure of the roof and cause it to fail prematurely.

Increased Stress on the Roof Structure

Foot traffic can put extra stress on the roof structure, which can weaken it over time and lead to failure. This is especially true if the roof structure is on the older side and not well-maintained. The stress can cause the structure of the roof to become weakened or even damaged, leading to leaks and other problems.



It's important to minimize foot traffic on a tile roof and to avoid walking on the roof altogether whenever possible. If you need to access the roof for maintenance or repair purposes, it's best to use a ladder or scaffolding that distributes the weight evenly and minimizes the impact on the roof.

Roof Tiles Exposed to Extreme Weather Conditions

Tile roofs can typically withstand the elements well, but exposure to extreme weather conditions like heavy rain, wind, hail, and hurricanes can cause damage that can lead to broken tiles and a need for a new roof.

Severe weather conditions can put significant stress on a tile roof and cause it to fail prematurely if it's not properly installed and maintained. Some ways that severe weather conditions can cause a tile roof to fail include:

1. **High Winds:** High winds can cause tiles to become dislodged or damaged, resulting in leaks and other problems. High winds can also put extra stress on the roof structure, which can cause it to weaken and fail over time.
2. **Hail:** Hail can cause significant damage to a tile roof, leading to cracks, chips, and other problems. The tiles may need to be replaced, and the underlayment may need to be repaired or replaced, to prevent water infiltration and other problems.
3. **Heavy Rain:** Heavy rain can cause water to penetrate a tile roof, causing leaks and other problems. A tile roof needs to be installed correctly and with proper workmanship to ensure that it is water-tight and can withstand heavy rain.
4. **Extreme Heat:** Extreme heat can cause the tiles to expand and contract, which can cause them to become dislodged or damaged. The tiles may also become brittle and break, leading to leaks and other problems.
5. **Freezing Temperatures:** Freezing temperatures can cause the tiles to become brittle and crack, leading to leaks and other problems. In addition, snow and ice buildup on the roof can put extra stress on the roof structure, which can cause it to weaken and fail over time.

ROOFING

Comments