



The 8 Factors that Influence the Cost of a Metal Roof

It's always fun for me when I watch others try to answer this question because they start dancing. And, man, do they have some crazy moves when confronted with the price question! Amidst a lot of sputtering, I hear things like:

"Well, it really depends. It depends upon what metal roof you choose, the condition of your current roof, the geometry of your roof, where you live, how the economy is doing, and whether you want sprinkles on top. The real thing to talk about is VALUE and value depends upon how long you intend to stay in your home, what your energy bills are, how severe your weather is, and other things."

And, fact is, I have given those answers myself as well!

Because, yes, there are many variables that impact the cost of ANY roof, not just a metal roof. And, yes, you can look at the upfront cost or the cost per year over time. It all depends on your plans, priorities, and goals.

But, here's the conclusion I have come to – there is a price tag for everything and the savvy homeowner who is considering a metal roof deserves to know what that price tag is! Despite all the dancing that goes on when this question is asked, it is a question that can be answered and this article will give you that answer.

Here's a quick story that tells part of the answer, and why this is a question that always makes sales people squirm:

I was recently shopping for a new car. And, in my shopping, I discovered something that seemed absolutely crazy to me. The car model I was looking at had a price range where the top-end model with the big engine and all the bells and whistles was more than THREE TIMES THE COST of the basic model! Yes, you heard that right! THREE TIMES! And this was not some crazy high-end foreign car from Sweden or Germany. This was a Chevrolet Camaro – about as American as it gets these days!

The reality is, though, that's the world in which we live today. Lots of options. Lots of choices. Some are well worth the expense and some are just "sprinkles on top". But they still have value to different consumers. There is always something to suit all needs and tastes. It all depends upon what you want – starting years ago with Burger King, the consumer really can "have it their way!"

And the same goes with metal roofs. You can buy an "entry level" metal roof, an "investment grade" metal roof, and anything in between. In some cases, your product selection may have to do with your personal tastes and dreams, and in other cases it may have to do with the design of your home. In some cases, it simply ends up being budget-driven.

The ANSWER to the "How much does it cost?" question, then, depends upon whether you're talking entry level, investment grade, or someplace in between. So, let's start by looking at *The Eight Factors That Determine The Cost Of A Metal Roof*. While my website, www.asktoddmiller.com, regularly answers detailed questions about each of these eight factors and discusses the occasional exception to the rule, I will keep the information pretty simple and basic here because this is all about driving toward that ultimate question – "How Much Does A Metal Roof Cost?" – which I will answer!

The 8 Factors That Influence the Cost of a Metal Roof

1. Fasteners and Interlocks

Some metal roofs have exposed screw heads and some have all concealed fasteners. The products with concealed fasteners use more metal per square foot and they also require more intricate and slower equipment for production. Concealed fastener products are slower to install due to the way the panels must be fitted. Exposed fastener products just overlap on the edges whereas concealed fastener products have actual interlocks on two if not all four sides. All of these things mean that exposed fastener products are less costly than concealed fasteners. But, they also have high maintenance and durability concerns as the fasteners loosen and leak over time. Concealed fastener products are known for greater strength, wind resistance, and durability over time. As a general rule, “entry-level” products will have exposed fasteners and overlaps rather than interlocks. While these products may be suitable for some applications, property owners with a longer term view of roofing will often opt for concealed fasteners and interlocking panels.

2. Metals

Common metals available are steel and aluminum. Less common metals include copper and zinc. This order of the metals also reflects their cost from lowest to highest. The steel products are typically available in two versions, one with a corrosion-resistant coating that is primarily aluminum (sold under the trademarked name “Galvalume”) and the other with a corrosion-resistant coating that is primarily zinc. The zinc coatings, called galvanized, offer greater sacrificial qualities for performance on cut edges and scratches through the paint surface. Aluminum products are lower weight than steel and naturally rust-resistant. Copper and zinc are used unpainted for their distinctive “natural metal” beauty. The general cost of these products will range from Galvalume to galvanized to aluminum and then on to the more exotic options. Environment should be a significant consideration factor when deciding which metal you’d like. Harsh environments subject to salt or even acid rain are more demanding and heighten the need to consider a non-ferrous metal. Likewise, a property owner with very long term goals may opt for a longer-term metal such as aluminum or copper rather than steel.

3. Coatings

Many homeowners opt for the “natural steel” look of clear-coated steel that also has a zinc and/or aluminum coating on it. This is the “entry level” end of vertical panel metal roofing. The clear coating is a very low-end finish that wears away after about 5 – 7 years of weather exposure. The purpose of the coating is to protect the metal from damage during rollforming, transportation, and installation – not to provide significant additional life expectancy for the roof.

Aggregate or stone coatings are also available on some lower cost steel shingles. These coatings are beautiful, but their textured surface has been known to hold “roof algae” in certain environments – the dark streaks and stains that you see on asphalt shingles. The stone coatings can wear away over time similar to asphalt shingles and will cause problems with recyclability of the metal.

Colored paint finishes start with various polyester chemistries including “super” and “siliconized” polyesters. The higher-grade versions of these utilize superior pigmentation but, once the polyester resin begins to break down (which usually begins in earnest around year seven), the pigment is more exposed to ultraviolet light and chalk and fade ensue. Ultimately, paint finishes do wear away but can be recoated down the road; depending upon the chemistry, the coatings on most painted metal roofs will have an “erosion” period of 30 – 60+ years.

The highest grade paint finish available on higher end vertical panel and metal shingle roofs is a PVDF finish, marketed under the trade names of Kynar 500 and Hylar 5000. While even these coatings can still develop dark streaks in dirty environments, they offer the greatest overall durability and fade and chalk resistance of any paint finishes and, hence, are the most costly commercially-available finishes. They should have an “erosion” period of over 60 years. These coatings not only are more costly to begin with but they tend to be chosen by those manufacturing products that are more costly by design as well.

4. Styles

Residential metal roofs are available in two basic styles – vertical seam and modular panel. Amongst those variations, you will find differences in terms of exposed and concealed fasteners, as well as how the panels interlock. Most vertical seam panels are available in steel and aluminum as well as in the specialty copper and zinc metals.

Vertical seam panels range from exposed fastener “agricultural” panels to high end architectural standing seams. While standing seam panels have concealed fasteners, those fasteners may be driven through clips which allow full movement of the metal panels for thermal expansion and contraction or they may be through “nail hems” which have more limited movement similar to vinyl and metal siding.

Modular panels are available in a variety of looks including [shingle](#), [shake](#), [slate](#), and [tile](#). While many of these panels have concealed fasteners and interlocks on all sides, it's critical that you understand exactly what you're getting because some do not, and it makes a big difference in terms of cost and also performance.

The “entry level” exposed fastener corrugated panels are at the lowest price, followed by the nail hem standing seam, and then true standing seam and modular panels which will carry similar price tags. There are, of course, price variations based upon metals and coatings.

I do think a key consideration when it comes to choosing a metal roof style is choosing something that will complement your home's beauty and value. Ultimately, the style you choose will impact price as I have described but if it also impacts the curb appeal and value of your home, there are bigger considerations than just the initial cost.

5. Roof Configuration

There are two significant things to consider when it comes to the configuration of your roof. Very low pitch roofs are a concern and very complex rooflines merit extra consideration.

Modular panels are never appropriate for roofs under 3:12 pitch. For roofs under 2:12 pitch, rarely is anything except a mechanically seamed standing seam metal roof appropriate. These roofs are crimped shut for extra watertightness at low pitches.

As far as roof geometry, the more complex the roof is, the more time consuming it will be to install. One thing to keep in mind is that a huge shortage of construction laborers exists, and costs keep increasing. For complicated roofs, it can make sense to invest now in a product that will not require maintenance or replacement in order to avoid escalating labor costs.

If your roof has valleys, it is important to look for a metal roof system that has an “open” or “self-cleaning” valley system that will not clog with tree debris or ice and snow. These valley systems carry water on top of the roof system rather than on hidden channels beneath the roof’s surface. Additionally, when considering a metal roof, think about how much water your roof carries. Do upper level roofs drop water onto lower roofs? How long are your rafter lengths? These questions can be particularly critical for vertical seam metal roofs because those roofs will carry water in between the seams of long panels which can flood out under extraordinary demand.

My suggestion is to ask your contractor what the “tricky” area of your roof are, and then ask them what options there are for handling those. These options may be driven by the product style you choose or they may be driven more by installer preference. In some cases, the contractor may simply give you options. For example, if your roof has a “dead valley,” it could be handled with carefully flashed metal, some sort of roof membrane, or even some sort of coating. Of those three options, metal will be the most costly but also the most durable.

All this said, for more complex roofs, labor will be exponentially higher to install metal than to install asphalt shingles. That will be the case in the future as well so, again, is a common reason why many homeowners of more complex roofs tend to opt for metal and “do it once, do it right.”

6. Ventilation

While, unlike some products, metal roofs generally do not have their lives shortened by improperly vented attics, re-roofing your home is always the appropriate time to think about attic ventilation. Metal roofs generally adapt well to most types of attic exhaust vents. Proper attic ventilation helps with energy efficiency by exhausting gained heat from the sun back to the outside. Good attic ventilation is also key to avoiding winter ice dams in northern climates. Finally, a well-ventilated attic is a dry attic and a dry attic will be an attic without mold and with effective moisture-free insulation. Considering an upgraded ventilation package when you re-roof your home will add cost but may be well worth it in the long run.

7. Warranties

When you purchase a metal roof, you will receive two warranties. One will be from the manufacturer or supplier covering the product and the other will be from your contractor covering the installation workmanship. It is important to receive both in writing before you make a decision. You will find that “investment grade” metal roofs have more comprehensive warranties. Here are specific things to analyze about both your product warranty and your contractor warranty.

- Length Of Coverage
- Transferability – How Many Times?
- Is it Non-Prorated or Prorated (meaning it covers less as the roof ages)
- Exclusions
- Maximum Coverage (Could be related to the product only or even the coating only, or could cover even the costs to repair or replace the roof)
- Wind Warranty
- Hail Warranty
- Fade And Chalk Warranty
- Stability Of Company Behind The Warranty

The reality is that more costly products also tend to offer greater warranty protection. On the extreme low end, a product warranty may be only for the initial owner, have rapid proration, and perhaps cover only the value of the coating on the roof. However, on the high end, a warranty will encompass greater coverage and even offer things like multiple transfers and no proration over time.

8. Installation

While the above seven factors are all variables for which the homeowner can determine what is best for them and their home, Installation is not a variable factor in my opinion. An improperly installed metal roof will be an ongoing nightmare. I hear this from homeowners each and every day who contact me through www.asktoddmiller.com. Installation is never the place to skimp nor cut corners, not with an “entry level” metal roof and not with an “investment grade” metal roof.

When choosing an installer, here’s a general rule of thumb – if you’re talking to an installer who cannot show you photos with great specificity on how every flashing area on your roof will be handled, look for another installer. Otherwise, pay attention to how they show you that pipes, electrical conduits, skylights, solar tubes, sidewalls, chimneys, ridges, hips, gables, valleys, and eaves will be flashed. Does what they show you make sense? Does it carry water on top of the roof rather than in hidden channels that will clog with debris? Does it have minimal dependence on sealants? Are there areas where sealants can be replaced or covered instead with metal?

Oftentimes, a good way to find a qualified installer is to ask the manufacturer of your roofing for their suggestion.

My other major word of advice on contractor selection is that you get what you pay for in most cases. Larger companies, which have greater resources and typically greater stability, also have greater overhead, and will have higher prices than contractors working out of their trucks.

For extra assurance in choosing a contractor, refer to [44 Questions To Ask Your Contractor](#) or feel free to [email me](#) with details on your contractor and concerns that you have. You do not want to short-change the performance of your roof investment with inferior installation.



How Much Does a Metal Roof Cost?

As you have seen above, there are Eight Factors That Determine The Cost Of A Metal Roof. Just like that car I was looking at, your decisions on the Eight Factors will influence the total cost of the roof, and just like with the car models, there can be a significant difference between “entry level” and “investment grade.”

In fact, continuing the car analogy, it’s been my observation that the typical metal roof purchaser will spend about the same on a roof as they would spend if they were buying the new car of their choice. But, the metal roof retains its value over time, and doesn’t need to be replaced in 4 – 6 years. This is one driving factor behind many homeowners opting to finance their roof selection. Most contractors should be able to connect you with good finance options.

But, how much should it cost, Todd? Okay, here's the answer. Because I do not know how big your roof is, I am basing my prices on the installed cost per square foot of roof space. One common mistake in figuring this is forgetting that your roof is much larger than the square footage of your home's living space footprint. The square footage of roof space also takes into consideration the size of non-living space under your roof such as garages, porches, and overhangs, and also the pitch of the roof. There will also be a "waste factor" that figures into the final price. Waste factor depends heavily on the roof configuration but also, to some degree, on the style of metal roof being installed.

Here's what to expect for the cost of a metal roof installed by a quality contractor. The price ranges will cover some variations between particular brands and styles, the complexity level of most roofs, as well as other factors including the size and stability of the installation contractor. Please [contact me](#) if you ever have any questions in figuring out cost estimates on your metal roof.

Exposed Fastener Corrugated Roofing: \$6.00 - \$10.00

These products will have exposed fasteners and overlapping panels. expected maintenance can include tightening the screws after about 7 years and replacing the screws with larger screws after about year 15. The tightening may run about \$1 per square foot while replacement of screws can run 2 – 3 times that. Additionally, you run the risk of water infiltration around screws that age poorly or were not properly driven. Chances are by year 20 – 25, fade and chalk will be enough that homeowners may wish to repaint the roof (about \$4 per square foot) or replace it.

Nail Hem Steel Standing Seam: \$10.00 - \$15.00

The durability of these products will be enhanced by PVDF finishes rather than Polyester finishes. However, PVDF finishes will be at or above the high end of the price range. Polyester finishes will start to show noticeable fade and chalk by year 10 in most environments. This can impact home beauty and value. Additionally, most manufacturers of "nail hem" panels do not suggest running panels over 25' in length.

There are some folks running these panels in aluminum but I would avoid them due to wind resistance concerns.

Clip Fastened Steel Standing Seam: \$12.00 - \$17.00

Similar options and considerations to Nail Hem Steel Standing Seam. The main exception is that clip fastened panels tend to have less oil canning and they also are more suitable for panel lengths over 25'. Please note, too, that lighter gauge steel standing seams will have more likelihood of oil canning – having ripples be apparent in the installed panels. There are options to help avoid this such as “backer rod” and “entangled mesh” products but of course those add costs of their own of around \$1 - \$2 per square foot.

“Builder Grade” Steel Shingles Including Stone-Coated Products: \$12.00 - \$17.00

These products will often have overlapping panels rather than interlocking panels. Such overlaps can open up over time and allow for infiltration of water or debris. Some of these panels will also have exposed fasteners, which can be prone to problems over time. With stone-coated products, too, you run a greater risk of black streaks and stains accumulating on the stones, similar to how they do on asphalt shingles. Attempts to clean these may shorten the coating life as well as come at an expense of \$2 – \$3 per square foot. Streaks and stains on a roof will detract from home beauty and potentially from perceived value and remaining roof life.

“Investment Grade” Steel Shingles: \$14.00 - \$20.00

Higher quality steel shingles will usually have the higher-end PVDF finishes as well as all concealed fasteners and interlocking panels. This makes these much longer-term products prone to fewer problems over time. Maintenance should be minimal other than perhaps replacing some sealants or pipe flashings after 20 – 25 years. This may cost \$500 – \$1000 and is certainly a cost that can impact any long-term metal roof installation. As with any steel product, proper cutting of the panels is critical in order to avoid rust on cut edges. I'd also avoid highly-corrosive environments such as coastal applications.

Aluminum Shingles: \$18.00 - \$25.00

While the upgrade to aluminum is not inexpensive, it creates a permanently rust-free roof that is ideal for even corrosive environments. Many installers of these products have also adopted installation techniques that include covering vulnerable areas such as sealants and pipe flashings with matching metal. This protects those items from UV exposure, reducing maintenance even over the long term to virtually zero. Virtually always aluminum roofs will utilize the premium PVDF coatings.

Clip Fastened Aluminum Standing Seam: \$18.00 - \$25.00

See comments above related to aluminum shingles. For aluminum standing seam, clip fasteners are highly recommended rather than nail hem panels, in order avoid concerns related to the greater expansion and contraction of aluminum compared to steel.

Copper Roofing: \$28.00 - \$35.00

While copper is a very long-term roofing metal and it offers great flexibility for a wide variety of applications including even curved roofs and very low pitch roofs, one thing to keep in mind is that the run-off from copper will leave brown and even green streaks on anything it comes in contact with. It also can be damaging to non-copper gutters. While a copper roof should be very maintenance-free, some property owners may be bothered by the streaks and stains its runoff will leave.

Zinc Roofing: \$30.00 - \$38.00

With a life expectancy similar to copper, zinc roofing is also very long term with minimal maintenance. It does not have the runoff concern that copper has but zinc does require an airspace behind it in order to avoid rapid deterioration of the metal. This can increase cost and also make the roof more difficult to walk on.

WHERE DO YOU GO FROM HERE?

A decision for a metal roof is a big investment and one that you do not want to get wrong. Feel free to use my 40+ years of experience to guide you to the best possible choice. My step-by-step advice on buying a metal roof is as follows:

- Read [Ask Todd Miller](#) as much as possible, watch my videos, listen to my podcasts, and check out my answers to various questions.
- Watch the [Metal Roofing 101 video series](#).
- Download my free ebook on "[How To Buy A Metal Roof](#)" in order to understand terminology and important factors.
- Use the free online [Roofing Needs Profiler](#) to determine whether an "entry level," "mid-grade," or "investment grade" metal roof is most appropriate for you and your home.
- Use a free [Online Visualizer Tool](#) to see what your home would look like with various metal roof styles and colors.
- Choose the product and manufacturer you like best and then ask them for the contractor in your area whom they would trust to install their own roof.
- If you wish, allow me to be your free [Roofing Coach](#) to analyze your roofing needs



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