

**Residential Metal Roofing**

# **REGIONAL CONSIDERATIONS**



Your Metal Roofing Resource

**For more information visit [metalroofing.com](http://metalroofing.com)**

# QUALITY METAL ROOFING



**Your roof is one of the most critical components of your home, protecting both the exterior and interior.** As such, it is important that your roof is made from high quality products, installed by a quality professional, and from a reputable source.

Metal Roofing Alliance (MRA) members - including manufacturers, suppliers, supporting members, partner associations, contractors, distributors - are expected to meet the highest standards for quality, safety and dependability.

These quality metal roofing products are subjected to rigorous industry standards and performance testing, helping ensure your investment in a new metal roof will comply with building code requirements and perform reliably for years to come.

**Don't be fooled by inexpensive, sub-standard roofing materials that have the potential to put not only your roof investment, but your home, at risk!** While it's tempting to save a few dollars short-term, using sub-standard products will likely result in higher costs long-term due to required repairs, roofing failures, and the potential lack of warranty protection which can quickly wipe out any initial savings.

MRA manufacturer members stand behind quality products with solid warranties and uphold stringent business practices, offering peace of mind that comes from knowing your home will be well-protected, now and into the future.

In this MRA guide, we share regional considerations that should be considered when selecting a roofing product and why it matters. **HERE IS WHAT YOU WILL LEARN...**

<b>1. WHERE YOU LIVE MATTERS .....</b>	<b>Page 3</b>
<b>2. OTHER ROOFING CONSIDERATIONS .....</b>	<b>Page 7</b>
<b>3. APPENDIX - COMPARISON OF ROOFING PRODUCTS .....</b>	<b>Page 8</b>

## Section 1

# WHERE YOU LIVE MATTERS



One of your first considerations when re-roofing your home should be where you live. **Why?** Because the area in which you live can have a big impact on your roof and its potential lifespan. Understanding how your home's location could impact your roof will go a long way toward ensuring you select and install a roof that can exceed your performance expectations.

**Here are some important regional considerations that should impact your roof selection process...**

## HURRICANES & HIGH WINDS

**Consider the following if you live in an area that experiences hurricanes, tornadoes or high winds:**

- Wind Speeds – What wind speeds are common in your area? Do the wind speeds warrant special considerations when selecting a roof material and/or system?
- Performance Ratings – What roofing products are rated to withstand the wind speeds in my area? *(NOTE: there are recognized rating systems which measure roof system performance and uplift potential in high winds.)*
- Building codes – What do your state and local building codes require as it relates to high winds and uplift? *(NOTE: many building codes require only a minimum metric to be met...but will those protect your home?)*
- Insurance – Which roofing materials are rated to meet or exceed insurance company policy requirements?



**Many metal roofing systems have been tested and proven to perform in winds in excess of 140 mph and provide protection against impact damage from debris.**

Section 1 continued

# WHERE YOU LIVE MATTERS



## WILDFIRES

Consider the following if you live in an area where wildfires are a possibility:

- Fire Resistance – What roofing materials are tested and proven to be fire resistant?
- Performance Ratings – Which roofing materials are rated to withstand high heat such as from direct flame? What roofing systems / components will make my roof ember resistant?  
*(NOTE: there is a formal, recognized rating system in place for fire resistance.)*
- Building codes – What building code requirements related to flames or embers exist in my area and what roofing materials can meet those codes?
- Insurance – Which roofing materials are rated to meet or exceed insurance company policy requirements?

**Metal roofing, when combined with the correct roofing system components, can provide a Class A fire rating. The Class A rating, the highest rating possible, requires roofing systems to meet or exceed testing criteria as outlined by UL 790 (ASTM E 108) Standard Test Methods for Fire Tests of Roof Coverings, the industry’s most recognized standard for fire rating.**



Section 1 continued

# WHERE YOU LIVE MATTERS



## SNOW & ICE

Consider the following if you live in an area that experiences snow & ice:

- Snow Loads – What roofing options can support heavy snow loads (weight)? *(NOTE: Heavy snow and ice can weigh down your roof, potentially causing water leaks or damage.)*
- Snow Shedding – What roofing materials might assist with shedding snow, making the process easier and/or safer?
- Snow Guards – What snow guard options are available (and effective) for the roofing materials I'm considering?
- Ice Damming – What roofing options will minimize or alleviate ice damming?



**Most metal roofing systems are designed to carry heavy weight loads, such as snow and ice. And these same systems typically weigh less than other roofing options...so rest assured the weight on your home will be less compared to other roofing options.**

**Further, several metal roofing styles encourage snow shed and minimize ice damming due to their smooth surface.**

**Snow guards are readily available and easily fitted to every style of metal roof on the market.**



Section 1 continued

# WHERE YOU LIVE MATTERS

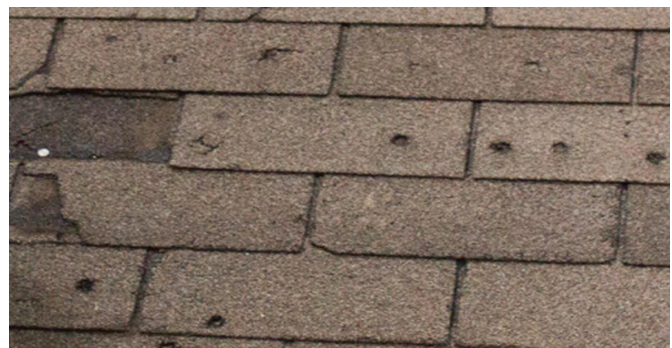


## HAIL

Consider the following if you live in an area that experiences large or frequent hail:

- Dent Resistant – What roofing materials are tested and proven to be dent resistant?
- Roof Substructure – In hail-prone areas, it is recommended that you install roofing over sheathing, not over purlins or existing roofing materials.
- Performance Ratings – Which roofing materials are rated to withstand hail that is large in size and falls at faster rates of speed? *(NOTE: there is a formal, recognized rating system in place for hail.)*
- Building Codes – What state and local building code requirements related to hail exist in my area and what roofing materials can meet those codes?
- Insurance – Which roofing materials are rated to meet or exceed insurance policy requirements? *(NOTE: be sure to clarify with your insurance company what types of hail damage would be covered as well as specific installation requirements they may have for the roofing material.)*

**Most quality metal roofing manufacturers offer UL 2218 Class 4 compliant roofing products. This rating qualifies for the Severe Hail (SH) requirements as defined by most major insurance companies.**



## Section 2

# OTHER ROOFING CONSIDERATIONS

Other regional considerations to consider when selecting the right roof for your home include...

### ENERGY EFFICIENCY

Metal roofing is available with “cool” coatings that can repel heat and minimize heating and cooling loads which equates to cost savings.

### SOLAR

Because of the long lifespan of quality metal roofing products, metal roofs are the perfect platform for solar panels. In fact, most metal roofs will outlast the solar panels themselves which means the solar panel warranties will not be voided by replacement of the roof underneath. And, as an added benefit, solar panel mounts for metal roofing typically do not require any penetration of the roof itself, which means less opportunity for water penetration.

### NOISE

Despite the perception, metal roofing is not any louder when it rains or when adverse weather hits, as compared to any other roofing material.

### LIGHTNING

Again, despite the misperception, metal roofing does not attract lightning. In fact, if lightning strikes your metal roof, the electricity will be spread out across a larger area, which diminishes the immediate impact.

### ENVIRONMENTALLY FRIENDLY

Metal is one of the most environmentally friendly roofing products on the market. Metal roofing is made of recycled material and is 100% recyclable at the end of its life. That means, unlike other roofing products, metal roofing can be reused and far less of it ends up in landfills.

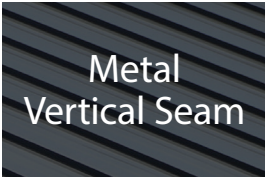
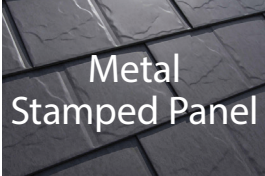






## APPENDIX

# COMPARING ROOF MATERIALS

When selecting a roofing material, there are many factors to take into consideration beyond installation cost. Here's a side-by-side comparison of metal roofs and other common roofing materials.

While the initial investment of a metal roof may be higher, rest assured **the overall cost of a metal roof over its lifetime will make metal roofing the most economical choice and add the greatest value to your home.**

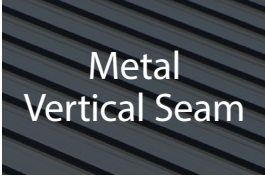
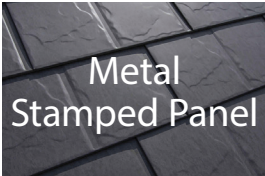
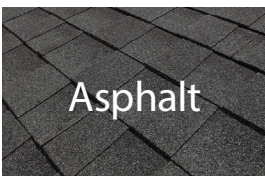

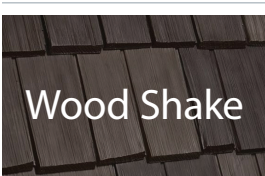
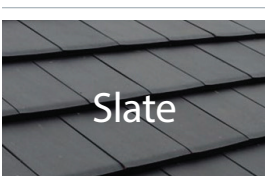
ROOF TYPE	Maintenance/Inspection	Aesthetic	Environment
 <p>Metal Vertical Seam</p>	<ul style="list-style-type: none"> <li>• Easy to maintain and clean as needed</li> <li>• Repairs and replacements are rare</li> <li>• Fade and chalk resistant with both PVDF or SMP paint systems</li> </ul>	<ul style="list-style-type: none"> <li>• Vertical seam panels offer a distinctive, timeless look</li> <li>• Available in a wide range of colors, styles, and shapes</li> <li>• Appealing on most home styles... especially modern, craftsman, and farm style</li> </ul>	<ul style="list-style-type: none"> <li>• Energy efficient</li> <li>• Made of recycled material</li> <li>• 100% recyclable at end-of-life</li> <li>• Low weight — ships easily</li> <li>• Can often be installed over existing asphalt roof</li> <li>• Eco-friendly</li> </ul>
 <p>Metal Stamped Panel</p>	<ul style="list-style-type: none"> <li>• Easy to maintain and clean as needed</li> <li>• Repairs and replacements are rare</li> <li>• Fade and chalk resistant with both PVDF or SMP paint systems or Stone Coated steel modular systems</li> </ul>	<ul style="list-style-type: none"> <li>• Metal stamped panel roofing can look like any roofing material... shake, tile, shingle and slate</li> <li>• Available in a wide range of colors, styles, and shapes</li> <li>• Appealing on any home style</li> </ul>	<ul style="list-style-type: none"> <li>• Energy efficient</li> <li>• Made of recycled material</li> <li>• 100% recyclable at end-of-life</li> <li>• Low weight — ships easily</li> <li>• Can often be installed over existing asphalt roof</li> <li>• Eco-friendly</li> </ul>
 <p>Asphalt</p>	<ul style="list-style-type: none"> <li>• Inspection every year at minimum</li> <li>• Shingle replacement common</li> <li>• Re-caulking and sealing as roof ages</li> <li>• Susceptible to mold and moss</li> </ul>	<ul style="list-style-type: none"> <li>• Standard asphalt shingle look</li> <li>• Variations in color shading</li> <li>• Limited color selection</li> </ul>	<ul style="list-style-type: none"> <li>• Made from crude oil and other chemicals</li> <li>• 11-13 million tons end up in landfills each year and can take 300-400 years to decompose</li> <li>• Not eco-friendly or energy efficient</li> <li>• Poor choice for solar</li> </ul>
 <p>Clay &amp; Concrete Tile</p>	<ul style="list-style-type: none"> <li>• Inspection every year</li> <li>• Occasional repair of cracked and sliding tiles</li> <li>• Frequent tile repair/replacement</li> <li>• Minor upkeep needed</li> </ul>	<ul style="list-style-type: none"> <li>• Limited style / shape options</li> <li>• Limited color selection</li> <li>• Appealing only on certain types of homes</li> </ul>	<ul style="list-style-type: none"> <li>• Considered eco-friendly</li> <li>• Energy efficient</li> <li>• Recyclable</li> <li>• Natural venting may mean reduced heat transfer</li> </ul>
 <p>Wood Shake</p>	<ul style="list-style-type: none"> <li>• Inspection every year</li> <li>• Maintenance required every 2-4 years</li> <li>• Susceptible to mold growth, pests, rot, staining, and leaks</li> </ul>	<ul style="list-style-type: none"> <li>• Rustic and tapered for a natural appearance</li> <li>• Appealing only on certain types of homes</li> </ul>	<ul style="list-style-type: none"> <li>• Considered an eco-friendly roofing material if sourced from a sustainable Forest Stewardship Council approved manufacturer</li> <li>• Recyclable</li> </ul>
 <p>Slate</p>	<ul style="list-style-type: none"> <li>• Inspection every year</li> <li>• Occasional repair of cracked, chipped, and sliding slates</li> <li>• Susceptible to color variations if replaced</li> </ul>	<ul style="list-style-type: none"> <li>• Limited style option</li> <li>• Limited color selection</li> <li>• Appealing on Colonial, European, and other more historical home styles</li> </ul>	<ul style="list-style-type: none"> <li>• Considered eco-friendly</li> <li>• Recyclable</li> <li>• Not an ideal platform for solar panels</li> </ul>



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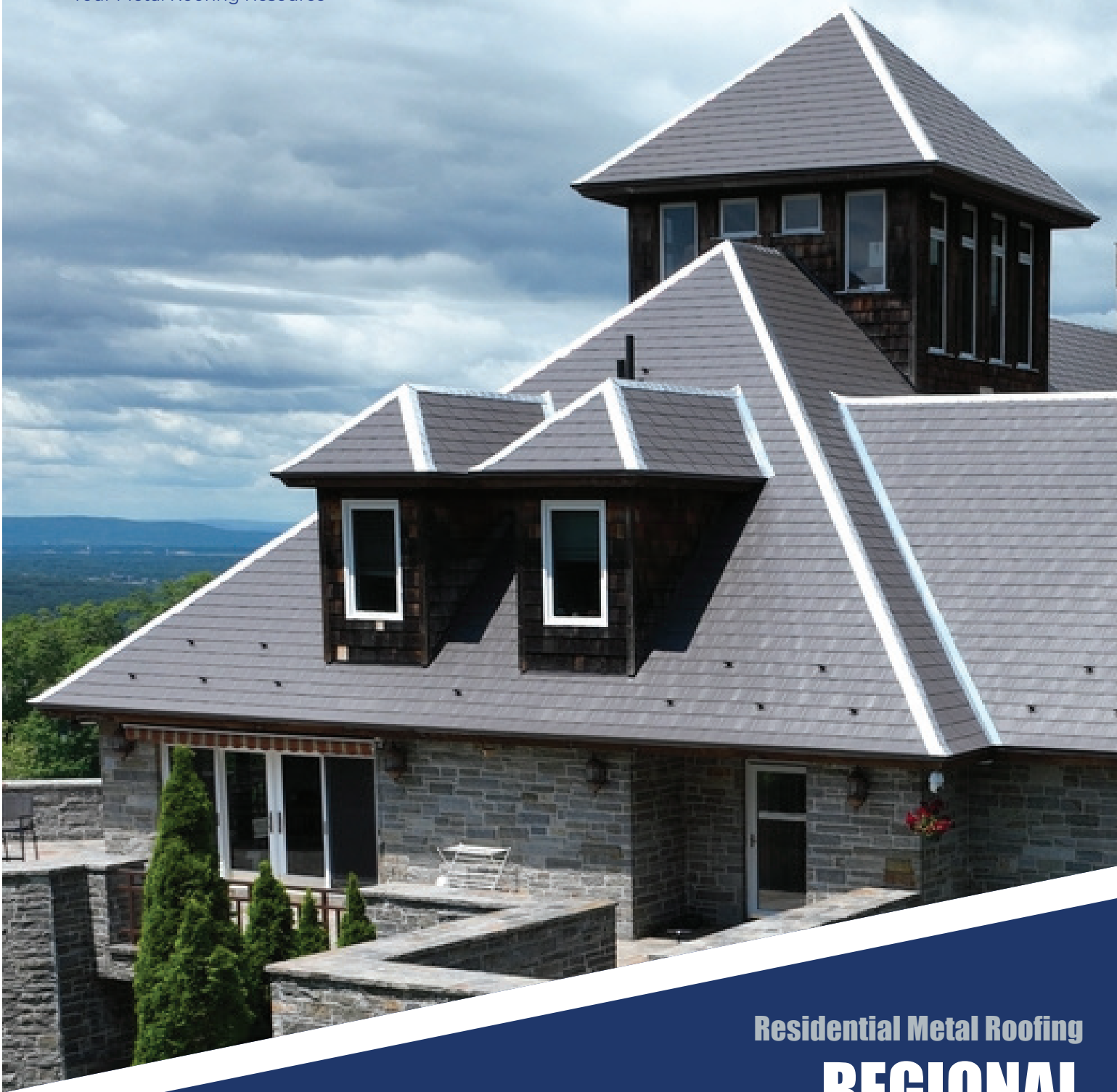
# COMPARING ROOF MATERIALS

(Continued)

ROOF TYPE	Cost *	Performance	Expected Lifespan
 <p><b>Metal Vertical Seam</b></p>	<ul style="list-style-type: none"> <li>• \$500-\$2,500 per square<sup>^</sup></li> <li>• Improves home resale value</li> <li>• Potential savings on insurance</li> <li>• Light weight = less to ship, less framing requirements, and easier to handle</li> </ul>	<ul style="list-style-type: none"> <li>• Offer superior protection in severe weather events including hail, high winds and hurricanes, wildfires, and heavy snow and ice</li> <li>• Cool roofing paint options provide added emissivity and reflectivity which can = lower energy usage (heating and cooling)</li> </ul>	<ul style="list-style-type: none"> <li>• Average lifespan 50+ years</li> <li>• Typically a 30-50+ year warranty</li> <li>• Transferable warranty in most cases</li> </ul>
 <p><b>Metal Stamped Panel</b></p>	<ul style="list-style-type: none"> <li>• \$900-\$2,500 per square*</li> <li>• Improves home resale value</li> <li>• Potential savings on insurance</li> <li>• Light weight = less to ship, less framing requirements, and easier to handle</li> </ul>	<ul style="list-style-type: none"> <li>• Offer superior protection in severe weather events including hail, high winds and hurricanes, wildfires, and heavy snow and ice</li> <li>• Cool roofing paint options provide added emissivity and reflectivity which can = lower energy usage (heating and cooling)</li> </ul>	<ul style="list-style-type: none"> <li>• Average lifespan 50+ years</li> <li>• Typically a 30-50+ year warranty</li> <li>• Transferable warranty in most cases</li> </ul>
 <p><b>Asphalt</b></p>	<ul style="list-style-type: none"> <li>• \$400-\$1,200 per square*</li> <li>• Frequent roof replacement (every 10-20 years)</li> <li>• Ongoing maintenance is required</li> <li>• Cleaning required frequently and often causes loss of granules</li> </ul>	<ul style="list-style-type: none"> <li>• Due to their composition, are highly combustible &amp; not recommended in wildfire prone areas</li> <li>• Offer limited protection in severe weather events (ex: high winds or hail)</li> <li>• Not ideal in hot climates which can cause curling, cracking, &amp; heat retention</li> </ul>	<ul style="list-style-type: none"> <li>• Average lifespan 10-20 years</li> <li>• Warranty length varies by shingle manufacturer and material</li> <li>• Warranties are often heavily pro-rated and have many limitations</li> </ul>
 <p><b>Concrete &amp; Clay Tile</b></p>	<ul style="list-style-type: none"> <li>• \$700-\$2,000 per square*</li> <li>• Heavy weight = increased shipping and structural framing costs...may also need to have a structural inspection</li> <li>• Heavy weight = greater difficulty for installers</li> </ul>	<ul style="list-style-type: none"> <li>• Limited wind resistance</li> <li>• Tiles can be brittle / fragile and easily damaged</li> <li>• Roof tiles can become a safety hazard during extreme high winds</li> </ul>	<ul style="list-style-type: none"> <li>• Average lifespan 30+ years</li> <li>• Typically a 30-50+ year warranty</li> <li>• Warranties are often pro-rated and have limited transferability</li> </ul>
 <p><b>Wood Shake</b></p>	<ul style="list-style-type: none"> <li>• \$800-\$1,500 per square*</li> <li>• Frequent cleaning needed to prevent mold, pests, staining, etc.</li> <li>• Requires protective treatments every 1-3 years by a professional</li> </ul>	<ul style="list-style-type: none"> <li>• High risk in wildfire prone areas</li> <li>• More prone to leaks in wet environments</li> <li>• May present additional issues in severe weather events</li> </ul>	<ul style="list-style-type: none"> <li>• Average lifespan 30+ years</li> <li>• Typically a 30-50+ year warranty</li> <li>• Warranties are often pro-rated and have limited transferability</li> </ul>
 <p><b>Slate</b></p>	<ul style="list-style-type: none"> <li>• \$1,200-\$3,000 per square*</li> <li>• Heavy weight = increased shipping expense</li> <li>• Heavy weight = potential need to have structural inspection prior to adding slate roof</li> <li>• Improves home resale value</li> </ul>	<ul style="list-style-type: none"> <li>• Slate is brittle so any impact event can result in cracked or broken tiles</li> <li>• Roof tiles can become a safety hazard during extreme high winds</li> </ul>	<ul style="list-style-type: none"> <li>• Average lifespan 75+ years</li> <li>• Typically a 30-50+ year warranty</li> <li>• Warranties are often pro-rated and have limited transferability</li> </ul>

\* Pricing may vary by region, product, geometry, complexity, and/or condition of the roof.

<sup>^</sup> Vertical Seam price range includes agricultural panels (thru-fastened) as well as architectural standing seam.



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