



ABM PANEL



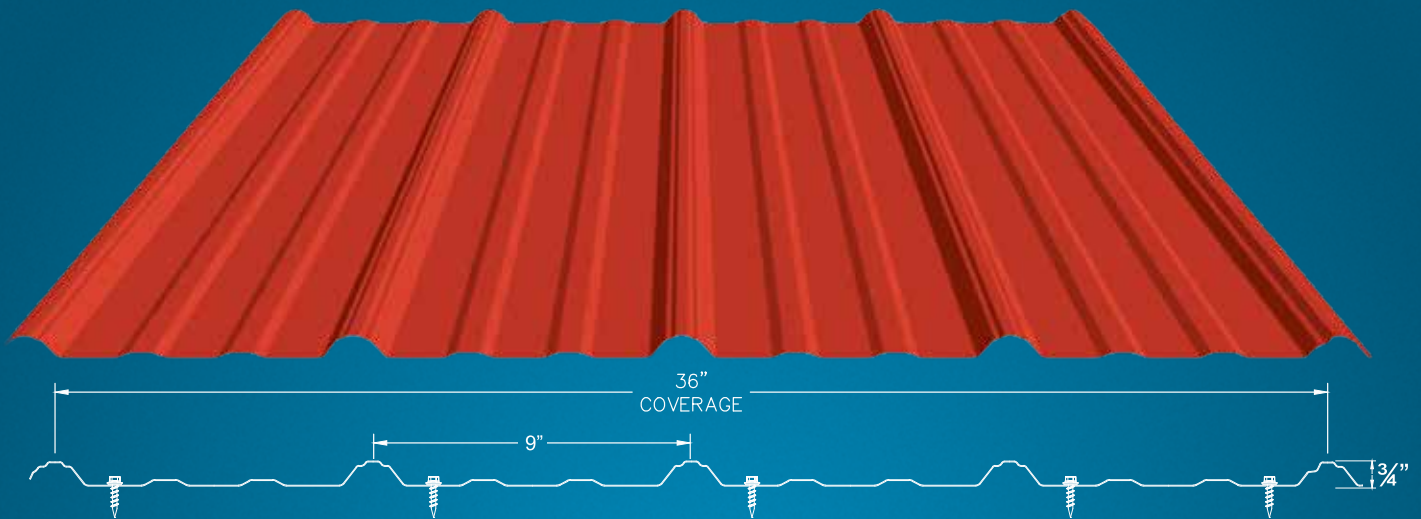
ROOFING & SIDING

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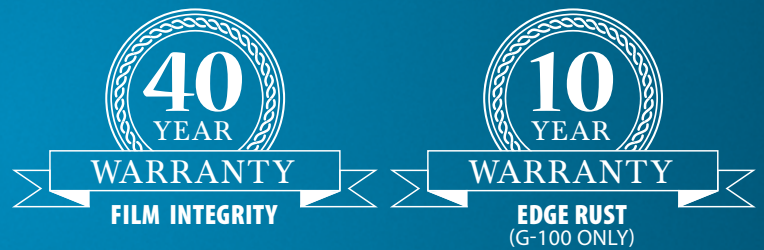
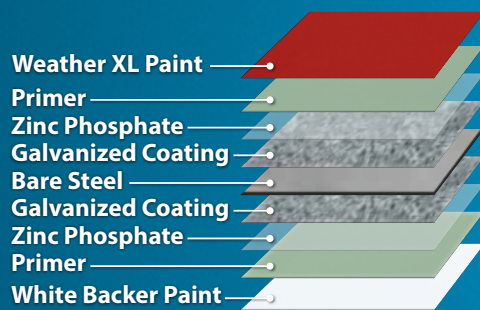


The Premium G-100 ABM Panel is an Excellent Choice for ***Residential, Commercial, and Agricultural*** Roofing and Siding

Premium G-100 Galvanized



8 LAYERS OF PROTECTION



Premium G-100 Galvanized

Not all galvanized steel is created equal. The 1 ounce of zinc per square foot makes G-100 one of the best substrates in the world. Our G-100 galvanized steel is made by passing bare steel through a bath of molten zinc at 842 degrees Fahrenheit. The fast-acting zinc coating gives the steel sheet its resistance to weathering and rust, and offers the best cathodic (sacrificial) protection when scratched or cut.

Weather XL™ Paint System

Weather XL™ is a silicon-modified polyester (SMP) paint system from Sherwin-Williams that provides strong resistance to scratching, chalking, fading, and weathering. The Premium G-100 ABM Panel is available in 20 high-performance colors.



Heat-Formed for Better Rust Protection

We heat the ABM Panel to 125°F to prevent microscopic cracking of the paint coating as the panel is formed. Heating the panel allows the paint to flex as the panel is shaped. (See more on page 10.)



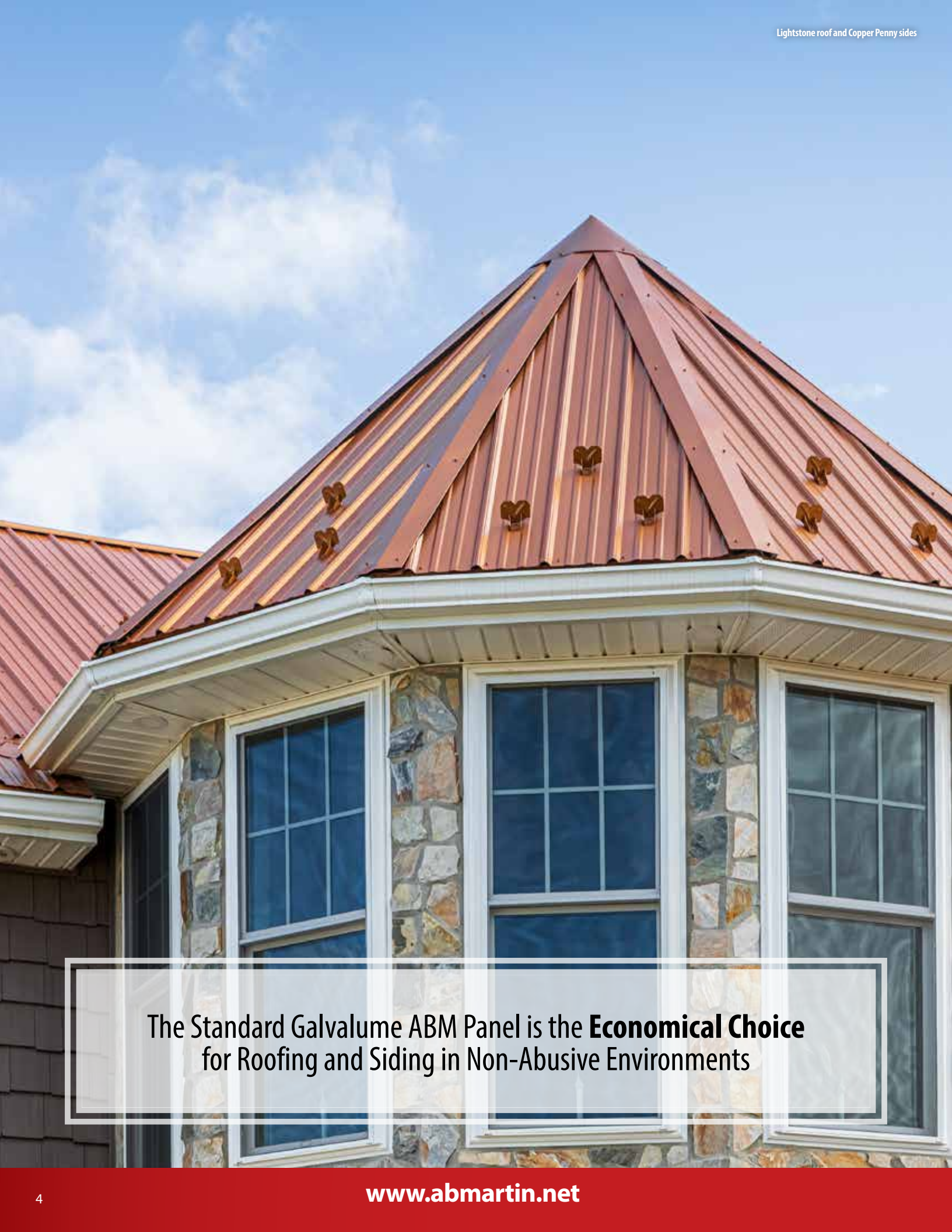
Heavy Gauge Steel Means Better Durability

The G-100 ABM Panel has a minimum bare steel thickness (before paint) of 0.0157" which is classified as 28 gauge.



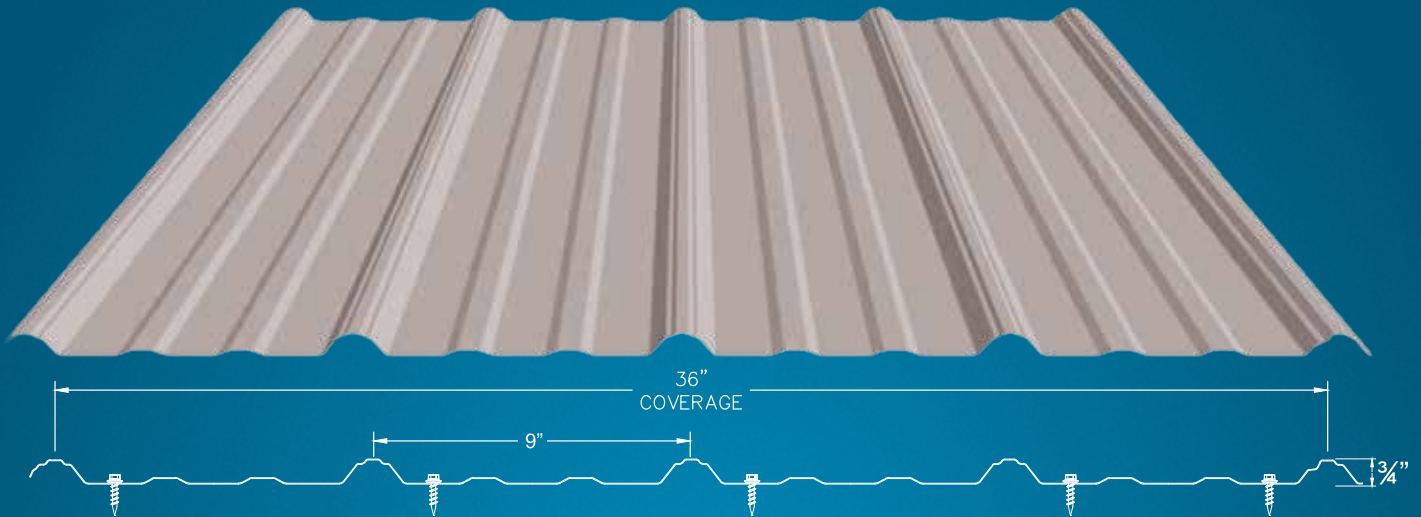
Best Option for Animal Confinement

G-100 galvanized steel is known to resist ammonia better than Galvalume. That is why galvanized steel is the only substrate we recommend in the presence of vapors from animal confinement.

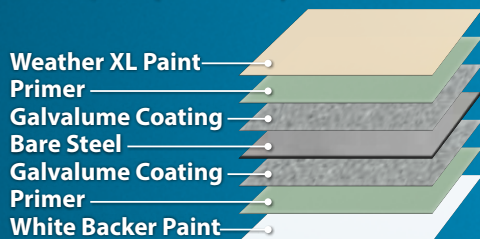


The Standard Galvalume ABM Panel is the **Economical Choice** for Roofing and Siding in Non-Abusive Environments

Standard AZ50 Galvalume



6 LAYERS OF PROTECTION



Standard AZ50 Galvalume

The economically priced Galvalume has a proven track record. It is made from bare steel covered with a mixture of zinc, aluminum, and trace amounts of silicon to improve its long-term weathering capabilities. But it has its disadvantages. First, it is known to exhibit more short-term edge rust and tension bend stains than galvanized. And second, it performs poorly in the presence of vapors from animal confinement.

Weather XL™ Paint System

Weather XL™ is a silicon-modified polyester (SMP) paint system from Sherwin-Williams that provides strong resistance to scratching, chalking, fading, and weathering. The Standard ABM Panel is available in 25 high-performance colors – 11 of which are also available in the heavier 26 gauge.



Heat-Formed for Better Rust Protection

We heat the ABM Panel to 125°F to prevent microscopic cracking of the paint coating as the panel is formed. Heating the panel allows the paint to flex as the panel is shaped. (See more on page 10.)



Heavy Gauge Steel Means Better Durability

The Standard ABM Panel has a minimum bare steel thickness (before paint) of 0.0157" which is classified as 28 gauge. It is also available in the heavier 26 gauge (0.019" minimum).



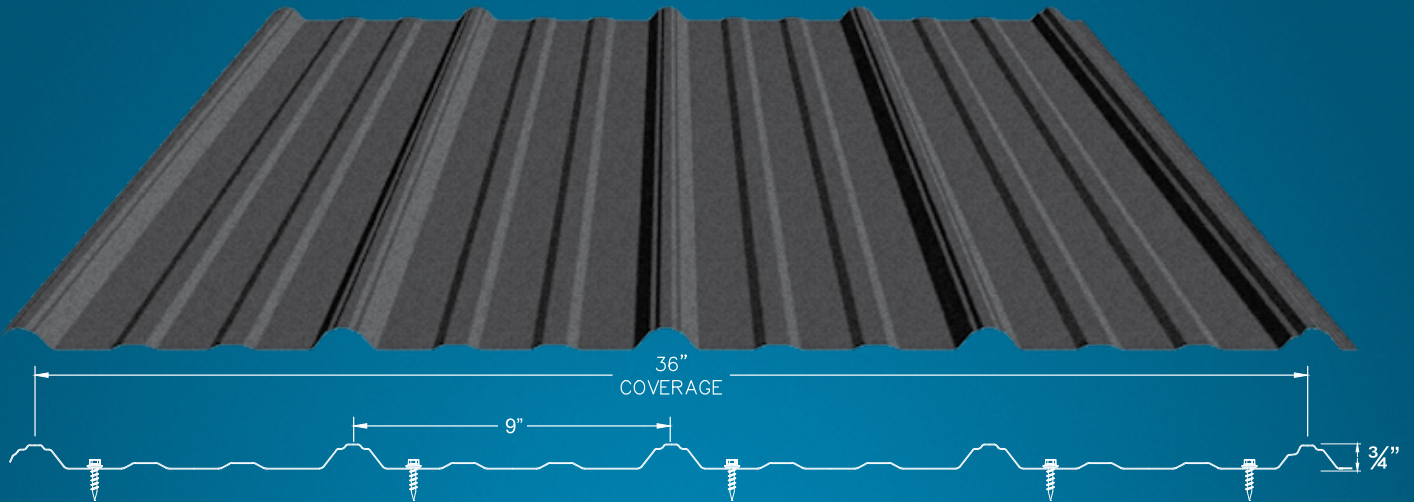
Not Recommended for Open-faced Animal Confinement

Galvalume does not perform well in direct contact with ammonia vapors from animal confinement. The life of the panel can be extended by the use of a vapor barrier like double bubble or by a solid roof deck.

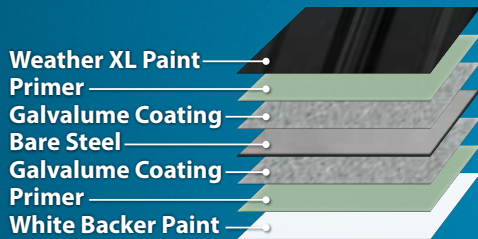


The Textured AZ50 Galvalume ABM Panel is a Popular Choice for **Residential** Roofing and Siding Thanks to its Glare Resistance

Textured AZ50 Galvalume



6 LAYERS OF PROTECTION



Textured AZ50 Galvalume

Homeowners like the Textured ABM Panel because the unique textured surface redirects sunlight, causing less glare than smooth panels. Contractors like it because the texture provides more grip during installation than smooth panels.

Weather XL™ Paint System

The Textured Weather XL™ is a silicon-modified polyester (SMP) paint system from Sherwin-Williams that provides strong resistance to scratching, chalking, fading, and weathering. The Textured ABM Panel is available in 9 high-performance colors.



Heat-Formed for Better Rust Protection

We heat the ABM Panel to 125°F to prevent microscopic cracking of the paint coating as the panel is formed. Heating the panel allows the paint to flex as the panel is shaped. (See more on page 10.)



Heavy Gauge Steel Means Better Durability

The Textured ABM Panel has a minimum bare steel thickness (before paint) of 0.019" which is classified as 26 gauge.



Not Recommended for Open-faced Animal Confinement

Galvalume does not perform well in direct contact with ammonia vapors from animal confinement. The life of the panel can be extended by the use of a vapor barrier like double bubble or by a solid roof deck.

Common Applications

RESIDENTIAL

Whether you need a metal roof for your home, or roofing and siding for your garage, the ABM Panel is competitively priced with shingles, but with a longer life expectancy. In contrast to the 15-20 year lifespan of shingles, the ABM Panel has a 40 year warranty on its paint alone. Plus, it is available in over 30 energy-efficient colors that can save on your energy bills.



COMMERCIAL

With your place of business, the roof or siding needs to serve two main purposes. First, it needs to be functional and durable because the longer it does its job without maintenance, the more profit stays in your business. Second, it should look attractive and show your customers that you care about the details. Your commercial facility will look sharp for years to come when you choose the ABM Panel.



AGRICULTURAL

Metal roofing and siding has been commonly used on farms across the country for over a hundred years. And it is easy to see why. The durability, ease of install, and longevity (which has only increased with improvements in coating technology) make metal panels like the ABM Panel a smart choice for dairy barns, chicken houses, hog barns, equipment storage sheds, and horse barns.



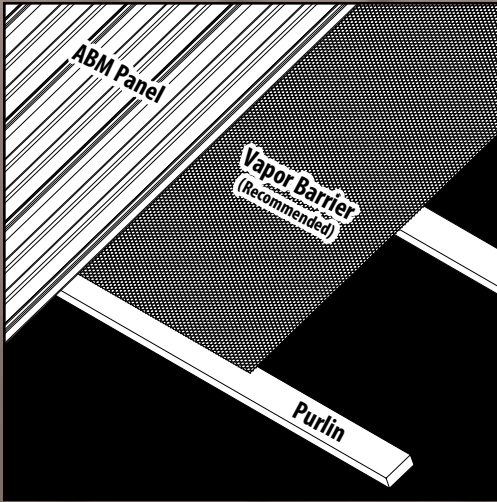
**GET INSPIRATION FROM
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www.abmartin.net/photo-gallery

Common Installations

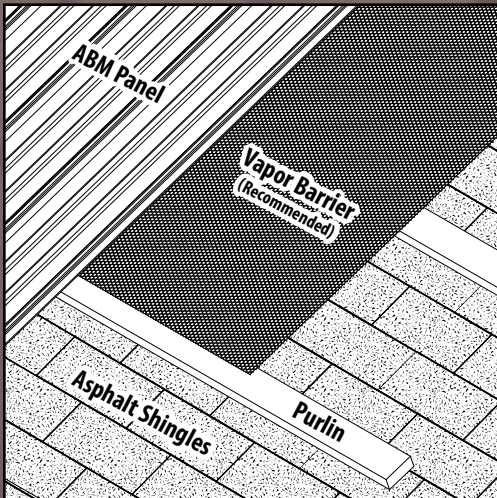
See Installation Guide for More Details



OPEN-FRAMED

When installing the ABM Panel on an open-framed building – a common technique with pole barns – screw the panel into the 2x4 purlins spaced every 2 feet across the trusses.

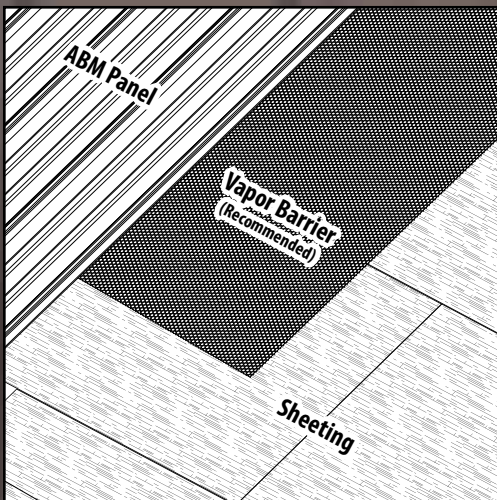
A vapor barrier such as Double Bubble, Felt, or Synthetic Felt Underlayment is recommended to prevent condensation. A vapor barrier can also help protect the panels from ammonia vapors caused by animal confinement.



OVER ASPHALT SHINGLES

If approved by local building codes, the ABM Panel may be installed over top of the existing shingle roof. Rather than laying the panel directly on the shingles, purlins that are fastened through the shingles into the rafters/trusses should be used. This is to keep the abrasive surface of the shingles from wearing through the primed underside of the ABM Panel as the metal expands and contracts with changes in temperature.

A vapor barrier such as Double Bubble, Felt, or Synthetic Felt Underlayment is recommended to prevent condensation.



OVER SHEETING

Special fasteners may be required when installing the ABM Panel on a plywood or OSB roof deck based on sheathing thickness. The screws should be allowed to penetrate the sheathing, but screw spacing requirements will vary depending on the thickness, type of sheathing, and uplift requirements.

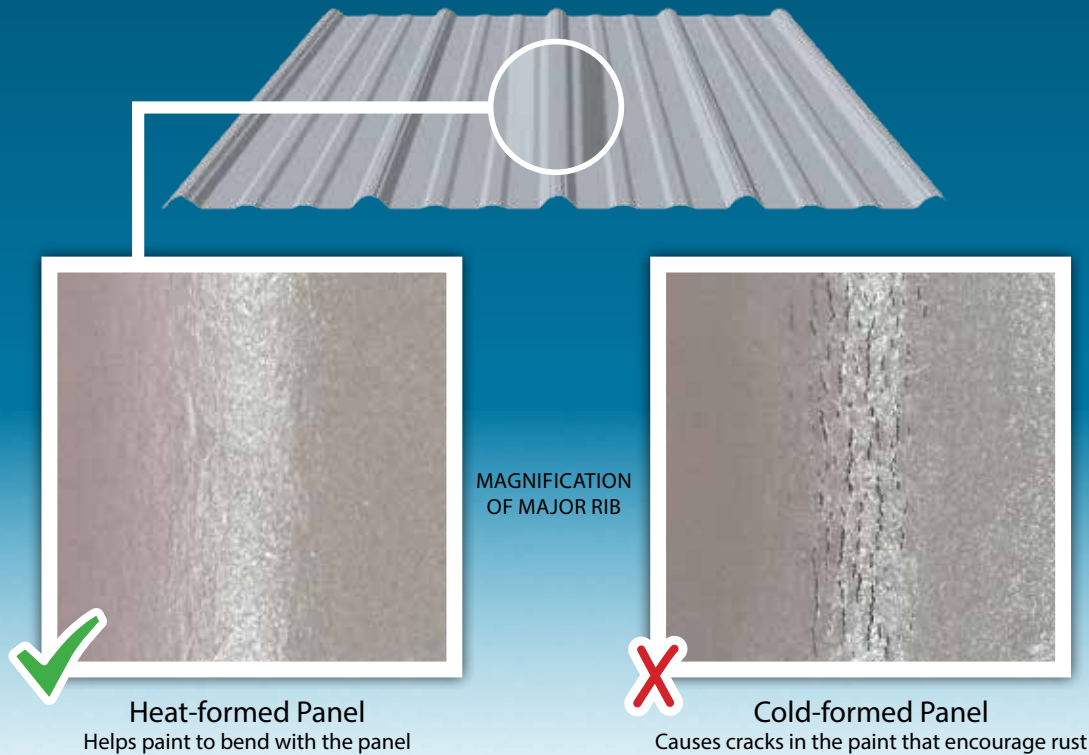
A vapor barrier such as Double Bubble, Felt, or Synthetic Felt Underlayment is recommended to prevent condensation.

NEED A BUILDER?

Find an ABM Panel professional at:
www.abmartin.net/contacts/find-contractor



THERE'S GOOD REASON WHY THE ABM PANEL IS HEAT-FORMED



HEAT-FORMED STEEL: WHAT IS IT AND WHY IS IT IMPORTANT?

"Heat-formed steel" and "cold-formed steel" are two terms that describe the different methods of manufacturing painted steel roof panels like the ABM Panel.

The photos below are examples of what can happen to cold-formed panels after only a few years of exposure to the elements.



The panels above were made on a cold winter day. And when the flat steel sheets went through the forming process, the paint cracked, rather than bending with the steel.

It was only a matter of time before rust started showing in the tiny cracks.

But it's important to note that cracking doesn't just happen on cold winter days. According to the United States Steel Corporation, the steel needs to reach temperatures between 120° and 170° Fahrenheit or else...*crack*.

If the panels were painted after they were rolled into their unique profile, cold-forming wouldn't be a problem. But the 5-ton coils come pre-painted from the factory.

So what is the alternative to cold-forming? The solution is to add an extra machine that we call a heat box to the assembly line. It's basically an oven. An oven that gets really hot. Like 1,000° hot!

In the second it takes for the steel to pass through the heat box, it goes from room temperature to over 125°F.

The oven temporarily softens the paint, which allows it to flex and bend with the steel as it goes through the roll former.

The steel cools down, the paint hardens, and the problem is solved. No rust stains.



Advanced stages of rust and paint deterioration on each bend of a cold-formed panel.

A LEADER IN ENERGY-EFFICIENCY

— ENJOY THE COMFORTS OF A METAL ROOF —



"Since the metal roof has been installed, the upstairs is 10 to 15 degrees cooler in the summer."

LeRoy M., Ephrata, PA

BETTER COMFORT YEAR-ROUND WITH A METAL ROOF

Both metal and asphalt roofing get the job done when it comes to sheltering a building, but they really part ways when it comes to durability, energy efficiency, and cost.

If you didn't notice, it was hot this summer. And if you have ever been in an attic or crawl space in the middle of a summer day, you know what it feels like to be in an oven. The sun is beating down with all its force onto your asphalt shingle roof. Some of the heat is reflected, but the rest is absorbed through the roof into the air space and building below.

The nature of the materials used, with even the lightest color asphalt shingles, results in only about 22% of the sun's heat being reflected.¹

That means 78% of the heat is being absorbed into the building below and your air conditioning system has to work extra hard to cool off the building and keep you comfortable. You can see how hard your system is working by looking at your energy bill. Nobody likes to see their electric bill spike in the summer.

Did you know that choosing a metal roof can save you money?

MEET THE ABM PANEL.

The most popular metal panel from AB Martin is by far the heavy-duty and long-lasting ABM Panel. This specially coated panel reflects as much as 84% of the sun's energy away from the roof, resulting in a

cooler building, more energy savings, and greater comfort.

The reflectivity level varies based on color, varying from Dark Blue (13% reflective) to Bright White (84% reflective), but averaging 44% reflective... which is twice as reflective as asphalt shingles.

Metal roofs can be about 100 degrees cooler on the surface than traditional asphalt roofs.²

Plus, the ABM Panel comes with a 40-year warranty, so you can enjoy your energy savings for a long time to come.

¹ According to the Florida Solar Energy Center: <http://www.fsec.ucf.edu/en/publications/html/FSEC-CR-1682-00/images/e-dsn-3.htm>

² How Stuff Works: <https://home.howstuffworks.com/home-improvement/construction/green/shingles-or-metal-roof.htm>

How the ABM Panel is Made



1. PRE-PAINTED COILS

We purchase the 5-ton steel coils that meet our quality specifications directly from the steel plant.

We ship them, first, to the coating facility, where the precoat and Sherwin-Williams' top coat are applied, before shipping them to our warehouse.

The coils are cataloged and carefully stored out of the weather – ready for use.



2. UNCOILED

When an order is received, the coils are placed on the uncoiler that feeds the steel onto the rollformer.



5. CUT-TO-LENGTH

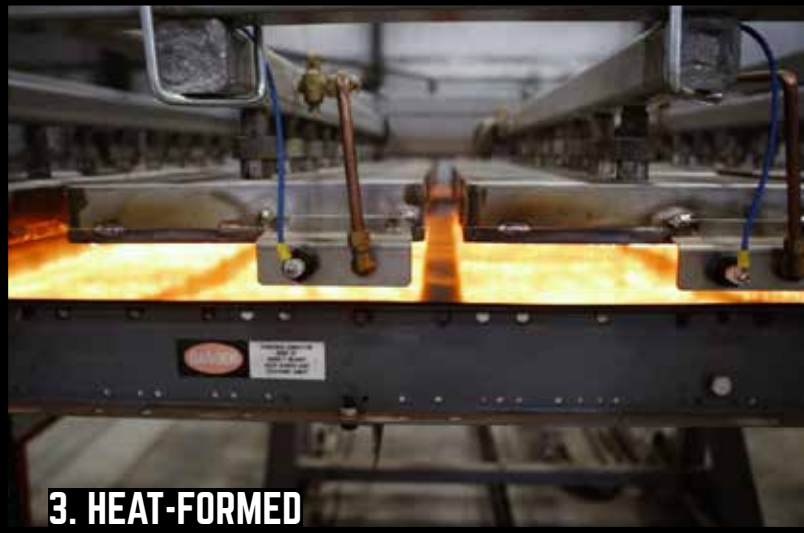
The ABM panel is made to custom lengths within a ¼" thanks to what we call the "flying shear." The flying shear cuts the steel with amazing precision as it speeds down the line.



6. ROLL-FORMED

The cut sheets go through a series of rollers with dies that form the steel into the ABM Panel profile.

Ready in hours... not days.



For better performance, the ABM panel passes through a 1,000° Fahrenheit heat-box that warms the panels and temporarily softens the paint coating. This allows the paint to flex and bend with the steel as the panel is formed.

Without heat-forming, the paint would crack and would likely rust. (More on page 10)



Each ABM panel is imprinted on the underlap with the order number, customer name, panel length, the date it was made, and the product grade (example: *G-100* or *Standard*).

This is how we are able to offer our low-hassle 40-year warranties. If there is ever a problem, the customer only needs to unscrew one of the panels to find the order number and manufacture date to initiate a warranty claim.



A cover sheet (which often varies in color) is placed on top of the stack to protect the panels before the stack is banded together.



A forklift transports the bundled panels to the customer's waiting truck or trailer, or places it on the holding rack ready for shipment to the job site.

Watch the ABM Panel being made:



3 Ways to Choose Your Colors



COLOR SAMPLES - *Most Accurate*

The best way to accurately choose the colors for your new roof or wall panel is take one of our free metal samples along home.

Though the reflectivity of the paint is great for energy-efficiency, it also means the color is going to look slightly different at different times of the day. So it is a good idea to test the colors in different lighting.



COLOR CHART - *Most Popular*

Using one of our free color charts is the next best option and the most popular option for choosing colors.

We go to great lengths to ensure color accuracy, and it is a great way to compare colors side-by-side, but the painted panels will have unique characteristics that cannot be duplicated perfectly with ink on a page.



ONLINE POLE BARN COLOR VISUALIZER

The online color visualizer is a fun way to experiment with different colors on a photo of a real building. It is truly unique in that you can choose unlimited color combinations for the roof, siding, trim, and wainscoting.

But because of the limitations of the visualizer and the variations in color renditions on digital screens, the accuracy of the colors is not guaranteed. Once you have narrowed your selection, request free metal samples to finalize your selection. **Go to:** www.abmartin.net/metal-roofing-panels/abm/color-visualizer



The Advantages of Steel Roofing

Longevity

Perhaps the main advantage steel roof panels have over other roofing materials is longevity. Asphalt shingles are very popular, but mostly just in North America. In Europe and other parts of the world – where the houses are hundreds of years old – homeowners are not interested in putting on a roof that they will have to replace in 20 years or less.

Did you know that well-maintained steel roofs have been known to last well over 100 years?

Energy Efficiency

One of the great advantages of steel roofing is its ability to block radiant heat.

While asphalt shingles absorb radiant heat, the physical properties of steel cause the radiant heat from outside (during the summer), or inside (during the winter) to bounce off steel roof panels. Meaning, your AC doesn't have to work as hard when the heat is trying to get in, and your heating system doesn't have to work as hard when the heat is trying to escape.

Durability

Steel is by nature a hard substance, and steel roofing is actually the recommended roofing material in hail-prone areas because of its impact-resistance, as well as in hurricane zones because of its wind-resistance, and in areas subject to forest fires because of its fire-resistance.

Aesthetics

Other advantages of steel roof panels include their clean, architectural look and vibrant colors. For these reasons, steel roofs are growing in popularity among homeowners. (They like the unique look that can be modern or classic.)

Environmental Friendliness

It's almost not worth saying after talking about a steel roof that lasts for more than a lifetime, but, in contrast to other roofing products like asphalt shingles made from toxic materials that usually can't be re-purposed and are dumped into a landfill after only 20 years of service, a steel roof that's made from recycled material and is 100% recyclable after a long and useful life does seem like the more responsible choice.





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Sat: 7:00 am - 11:30 am
Closed Sundays

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AB Martin is a manufacturer and supplier of long-lasting building materials to the Northeast since 1947.