



MATTERHORN®

Architectural Shake, Slate, Tile and Standing Seam

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SHAKE

Shown in Weathered Wood



SLATE

Shown in Cobalt



TILE

Shown in Weathered Sage

Matterhorn: The Last Roof You'll Ever Need

Together we have an opportunity to solve **several big problems** with just one change in how we think about the material we use to protect: the homes we build and remodel, the people who live in them, and the environment we share.

Albert Einstein is often quoted for having said, "Insanity is doing the same thing over and over again and expecting different results." **And that is exactly what we have been doing by using asphalt shingles** that need to be replaced over and over again. The consequences of using this petroleum-based material have been compounding, and it has reached a tipping point for both homeowners and our environment.

	The Problem: Asphalt Shingles	The Solution: Matterhorn® Metal Roofing
Waste Production	Are now the number one post-consumer waste products in the United States—2.2 billion pounds annually end up in our landfills.	Can last 4x longer than an asphalt roof and can create zero landfill waste. Can be 100% recycled at the end of its life-cycle.
Water Quality	Can leach heavy metals (lead, mercury), unnatural chemicals, and harmful bacteria into our gardens and water sources.	Can provide clean water run-off to promote personal and environmental health.
Energy Usage	Absorbs solar radiation and traps heat which can increase energy consumption, costs, and carbon emissions.	Available in 24 ENERGY STAR® Rated colors that reflect up to 65% of solar radiation to significantly reduce energy consumption and carbon emissions.
Performance	Depreciates quickly and can increase homeowners insurance costs related to the increase in hail damage claims.	Supports industry-leading hail and fire ratings which can considerably reduce homeowner's insurance costs in most states.

If every home in the U.S. had a Matterhorn® ENERGY STAR® Rated Metal Roof rather than an asphalt roof it would save Americans over \$2 billion in energy costs annually, reduce carbon emissions equal to taking over 2 million cars off the road, and help to protect our lakes and wells while reducing land fill waste.

Let's build a better future together.



Dallas, TX Shown in Timber Ash



Ada, MI Shown in Timber Ash



Grand Rapids, MI Shown in Weathered Wood



Grand Rapids, MI Shown in Weathered Wood



Ada, MI Shown in Timber Ash

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ENGINEERING DETAILS

Our Shake panels were expertly curated by our Engineering team from pencil sketch to a finished, hyper realistic panel. This page highlights some of our most important design and engineering features.

Elevation Changes

Shake panels include eight separate elevation changes to replicate the irregularity of real wood shakes.

Patent pending.

Chiseling/Embossing

Chiseling and cracks are also used to mimic the organic look of real wood.

Patent pending.

Color

Our **Shake** line captures the four different stages in the life cycle of a cedar roof. Homeowners can choose a color variation that works with their home's exterior from a rich and darkly stained color to an iconic weathered silver-grey.

Patented Shadow Bead Fold

Placed where the shadow line would be on real wood shake when the wood shrinks up and creates a gap.

Patent pending.

EC² Clip & Indent

Matterhorn's high wind rating is thanks to our four point locking system secured with a patent pending concealed clip. A special stamped pocket on each panel allows for proper placement of the EC² clip.

US Patent No. 9,097,019.

Water Channel

Specialized chiseled trough is at maximum height to allow constant water movement away from the roof deck.

Patent pending.



Lansing, MI Shown in Timber Ash



Lansing, MI Shown in Timber Ash



Grand Rapids, MI Shown in Weathered Wood



Conway, SC Shown in Timber Ash



Conway, SC Shown in Timber Ash



Conway, SC Shown in Timber Ash



Conway, SC Shown in Timber Ash



Dallas, TX Shown in Timber Ash



Cedar

Panel Size: 22 1/8" x 47.5"
Thickness: .016" (30 gauge)

Initial Solar Reflectivity: 0.37
Measured Initial Emissivity: 0.88



Weathered Wood

Panel Size: 22 1/8" x 47.5"
Thickness: .016" (30 gauge)

Initial Solar Reflectivity: 0.32
Measured Initial Emissivity: 0.88



Shorewood

Panel Size: 22 1/8" x 47.5"
Thickness: .016" (30 gauge)

Initial Solar Reflectivity: 0.35
Measured Initial Emissivity: 0.88



Timber Ash

Panel Size: 22 1/8" x 47.5"
Thickness: .016" (30 gauge)

Initial Solar Reflectivity: 0.26
Measured Initial Emissivity: 0.88





Hickory Corners, MI Shown in Cobalt



Holland, MI Shown in Castle Gray



Hickory Corners, MI Shown in Cobalt



Hickory Corners, MI Shown in Cobalt



Holland, MI Shown in Storm Slate

W E A T H S P

ENGINEERING DETAILS

Our Shake panels were expertly curated by our Engineering team from pencil sketch to a finished, hyper realistic panel. This page highlights some of our most important design and engineering features.

Elevation Changes

Slate panels include eight separate elevation changes to replicate the irregularity of real slate.

Patent pending.

Chiseling/Embossing

Chiseling and cracks are also used to mimic the organic look of real slate.

Patent pending.

Color

Our **Slate** offering includes five color options in blue-gray, green-gray, brown-green and two choices in gray; one light and one dark.

EC² Clip & Indent

Matterhorn's high wind rating is thanks to our four point locking system secured with a patent pending concealed clip. A special stamped pocket on each panel allows for proper placement of the EC² clip.

US Patent No. 9,097,019.

Water Channel

Specialized chiseled trough is at maximum height to allow constant water movement away from the roof deck.

Patent pending.



Holland, MI *Shown in Storm Slate*

Holland, MI *Shown in Storm Slate*

Holland, MI *Shown in Storm Slate*

Holland, MI *Shown in Storm Slate*

Hickory Corners, MI *Shown in Cobalt*

Holland, MI *Shown in Storm Slate*

Slate



Mountain Sage

Panel Size: 22 1/8" x 47.5"
Thickness: .016" (30 gauge)

Initial Solar Reflectivity: 0.25
Measured Initial Emissivity: 0.87



Brownstone

Panel Size: 22 1/8" x 47.5"
Thickness: .016" (30 gauge)

Initial Solar Reflectivity: 0.26
Measured Initial Emissivity: 0.88



Castle Gray

Panel Size: 22 1/8" x 47.5"
Thickness: .016" (30 gauge)

Initial Solar Reflectivity: 0.23
Measured Initial Emissivity: 0.88



Cobalt

Panel Size: 22 1/8" x 47.5"
Thickness: .016" (30 gauge)

Initial Solar Reflectivity: 0.23
Measured Initial Emissivity: 0.88



Storm Slate

Panel Size: 22 1/8" x 47.5"
Thickness: .016" (30 gauge)

Initial Solar Reflectivity: 0.06
Measured Initial Emissivity: 0.88

All colors shown are mechanically reproduced and may vary slightly from actual color.



Ada, MI Shown in Brick Blend



Shown in Weathered Sequoia



Grand Rapids, MI Shown in Weathered Clay



Grand Rapids, MI Shown in Jade



Dallas, TX Shown in Brick Blend



Barrington, IL Shown in Weathered Canyon

ENGINEERING DETAILS

Our Tile panels were expertly curated by our Engineering team from pencil sketch to a finished, hyper realistic panel. This page highlights some of our most important design and engineering features.

5/8" Reveal

Matterhorn's 5/8" reveal provides the character and depth that your home deserves.

Lightweight

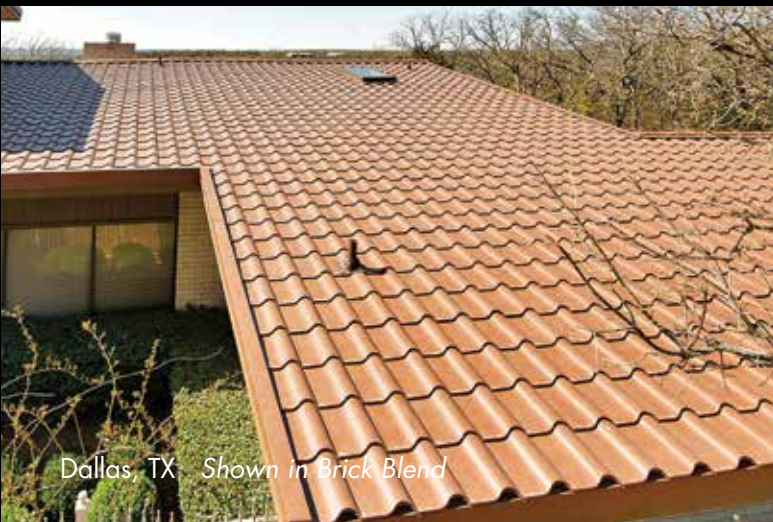
Only 108 lbs./square for Tile; that's less than many shingle brands! In many cases a Matterhorn® Tile roof can be applied directly over existing shingles.

Color

Eight colors make up our Tile line. Traditional and contemporary colors come together for a hue that will complement any style home.

Concealed Fastening System

Attached with a tongue and groove fit.



Dallas, TX Shown in Brick Blend



Grand Rapids, MI Shown in Jade



Ada, MI Shown in Brick Blend



Barrington, IL Shown in Weathered Canyon



Ada, MI Shown in Brick Blend



Barrington, IL Shown in Weathered Canyon



Shown in Weathered Clay



Ada, MI Shown in Brick Blend



Weathered Canyon

Initial Solar Reflectivity: 0.25
Measured Initial Emissivity: 0.89
Panel Size: 20 5/8" x 48"
Thickness: .019" (28 gauge)



Brick Blend

Initial Solar Reflectivity: 0.26
Measured Initial Emissivity: 0.89
Panel Size: 20 5/8" x 48"
Thickness: .019" (28 gauge)



Weathered Sequoia

Initial Solar Reflectivity: 0.28
Measured Initial Emissivity: 0.89
Panel Size: 20 5/8" x 48"
Thickness: .019" (28 gauge)



Tuscan Stone

Initial Solar Reflectivity: 0.27
Measured Initial Emissivity: 0.89
Panel Size: 20 5/8" x 48"
Thickness: .019" (28 gauge)



Weathered Clay

Initial Solar Reflectivity: 0.29
Measured Initial Emissivity: 0.87
Panel Size: 20 5/8" x 48"
Thickness: .019" (28 gauge)



Terracotta

Initial Solar Reflectivity: 0.32
Measured Initial Emissivity: 0.87
Panel Size: 20 5/8" x 48"
Thickness: .019" (28 gauge)



Weathered Sage

Initial Solar Reflectivity: 0.30
Measured Initial Emissivity: 0.89
Panel Size: 20 5/8" x 48"
Thickness: .019" (28 gauge)



Jade

Initial Solar Reflectivity: 0.29
Measured Initial Emissivity: 0.89
Panel Size: 20 5/8" x 48"
Thickness: .019" (28 gauge)



All colors shown are mechanically reproduced and may vary slightly from actual color.



Lansing, MI Shown in Stone White



Shown in Sierra Tan



Hickory Corners, MI Shown in Stone Gate



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Initial Solar Reflectivity: .0.27
Measured Initial Emissivity: 0.84

Initial Solar Reflectivity: .0.31
Measured Initial Emissivity: 0.86

Initial Solar Reflectivity: .0.28
Measured Initial Emissivity: 0.84

Initial Solar Reflectivity: .0.31
Measured Initial Emissivity: 0.84

Initial Solar Reflectivity: .0.28
Measured Initial Emissivity: 0.85

Burnished Slate



Earthstone



Midnight



Stone Gate



Riverwood



Initial Solar Reflectivity: .0.27
Measured Initial Emissivity: 0.85

Initial Solar Reflectivity: .0.45
Measured Initial Emissivity: 0.86

Initial Solar Reflectivity: .0.27
Measured Initial Emissivity: 0.85

Initial Solar Reflectivity: .0.66
Measured Initial Emissivity: 0.85

Initial Solar Reflectivity: .0.66
Measured Initial Emissivity: 0.79



Evergreen



Sierra Tan



Colonial Red



Stone White



Silver Stone



Matterhorn® Boxed Staggered Standing Seam

- Matterhorn's PVDF Tri-Pigment Reflective Technology® paint system offers the ultimate in reflectivity and fade protection.
- Painted on the back of each panel for exceptional protection.
- Thicker than most standing seam on the market at .0217" (26 gauge).
- All colors are ENERGY STAR® Rated.
- Staggered seam look essential to replicating the historic look of a metal roof.
- Color palette that blends well with the most popular roof colors on the market today.



Available in three size options:

- 6' long x 12" wide, 1.5" tall
- 10' long x 16" wide, 1.5" tall
- 12' long x 12" wide, 1.5" tall

Standing Seam

Performance

STRONGER THAN STEEL

Overview

Multiple layers of protective coating work in harmony to produce each Shake, Slate, Tile and Standing Seam Matterhorn® panel. The result is a metal roofing product that is quite literally, stronger than steel.

Solid Painted Back
Every surface is covered.

Tri-Pigment Reflective Technology®

Featuring a PVDF Paint System and ENERGY STAR® rated Cool Roof Technology.

Zinc Phosphate

An additional anti-corrosive layer that provides a superior bond for the paint system.

**Thermally Deposited
Anti-Corrosive G90 Coating**

**DDS High-Performance
Steel Alloy**

Performance

EXTREME TESTING

Overview

Matterhorn® Metal Roofing has an industry leading warranty against fire, wind and hail. In fact, many home insurance companies offer a discount on your insurance premium for using qualified metal roofing products just like ours.

**Fire Rating:
Class A**

Standard Used:
ASTM E-108

**Wind Rating:
130 MPH**

Standard Used:
AC166, UL 580, UL 1897

**Hail Rating:
Class 4**

Standard Used:
UL2218 (Class 4)

All Testing

We went beyond the most common testing standards and the result is a product so impermeable that we proudly offer a limited lifetime warranty.

Type of Test	Standard	Completed
Fire Classification	ASTM E-108 Class "A" Fire Rated *	✓
Wind	AC166, UL 580, UL 1897. Tile rated for 130 mph.	✓
Hail (TDI Approved)	UL2218 (Class 4).	✓
Gravity Load	ASTM E72	✓
Weathering	ASTM G-154	✓
Wind-Driven Rain	AC166 (Sec. 4.2)	✓
TDI Wind Approved	TDI Listing	Approved, listing in process
ACC166 Report #	IAMPO_ER_#304	✓
Florida Product #	FL17126	✓

Performance

SUSTAINABILITY

Environmental Impact

Sustainability

Matterhorn® Roofing systems are made with the environment in mind. This ENERGY STAR® rated product is designed to help combat climate change and preserve environmental quality.

Energy Savings

ENERGY STAR® rated Matterhorn® Roofing products are able to **reflect up to 66% of incoming solar radiation**. This Cool Roof technology **helps to keep homes cooler on hot days** and **saves homeowners money** and energy by reducing the amount of time their air conditioning unit is in use. The lowered demand on electricity also improves the electricity grid and reduces greenhouse gas emissions from both homes and power production plants.

Water Quality

Roofing material has a measurable impact on the quality of water from rooftop runoff. Water from an asphalt shingle roof can contain heavy metals like lead and mercury, chemicals used in waterproofing, and levels of bacteria that are unseen in runoff from coated metal roofs such as Matterhorn. For many of the same reasons, **metal roofs are commonly recommended for collecting rainwater** for domestic use. All of these features make Matterhorn Metal Roofing products a superior choice when considering better personal and environmental health.

Recyclability & Waste Reduction

Matterhorn Metal Roofs last more than four times as long as asphalt shingle roofs. They are also made from steel that can be 100% recycled at the end of its lifecycle. Compare this to the **2.2 billion pounds of asphalt shingles that are disposed of in US landfills each year**. Additionally, Matterhorn Roofs can usually be installed over existing asphalt shingle roofs, which reduces waste generated from reroofing.

Urban Heat Island Effect

Non-reflective asphalt and concrete surfaces form “heat islands” by absorbing excessive heat from the sun, which heats the atmosphere in urban areas and significantly raises air temperatures. **Matterhorn Roofing products mitigate the urban heat island effect by reflecting a large portion of solar energy to keep their surfaces cooler and lower urban air temperatures**. This helps reduce the increased mortality, energy demand, and air pollution associated with exposure of extreme heat in cities.

What if Every Home Had a Matterhorn® Metal Roof?

Estimated Total annual electricity savings for the entire United States: **\$2,934,433,922**

Estimated carbon emission savings are equal to this many cars off the road: **2,095,525**

There are many variables that will affect the energy savings of your Matterhorn® roof including but not limited to: location, previous attic insulation, attic ventilation, the existence of soffit and/or ridge vents, climate, roof pitch, roof area, weather conditions and selected Matterhorn product/color.

Numbers above based on Matterhorn® Shake in Cedar which has a 0.88 emissivity rating and an initial solar reflectivity of 0.37.

Calculations made using Department of Energy's Steep Slope Calculator produced by Oak Ridge National Laboratory. (1) Household savings calculations made assuming a 2100 sq. ft. home with 6/12 pitch roof, giving a roofing area of 2400 sq. ft., insulation R value of 10.00, and state energy price from July 2014 [2]. Savings estimates based on comparison to home with black asphalt roof. Statewide savings estimate assumes every house in the state currently has an air conditioner and is switching from a black asphalt roof. Statewide projections based on the number of single unit detached housing structures in the state from 2009 American Community Survey [3]. Projected 25 year savings made using estimated price of electricity from the Energy Information Administration's 2015 Annual Energy Outlook [4]. Carbon equivalencies estimated according to EPA Clean Energy Calculator [5].

1. Oak Ridge National Laboratory, . DOE Steep Slope Calculator. Department of Energy, June 2005. Web. 6 Aug. 2015.
2. "Electric Power Monthly." US Energy Information Administration. N.p., Sept. 2014. Web. 6 Aug. 2015.
3. U.S. Census Bureau, . "Table 989. Housing Units by Units in Structure and State: 2009." Statistical Abstract of the United States: 2012. N.p., 2012. Web. 10 Aug. 2015.
4. "Annual Energy Outlook 2015 With Projections to 2040." US Energy Information Administration, N.p., Apr. 2015. Web. 6 Aug. 2015.
5. U.S. Environmental Protection Agency, . "Greenhouse Gas Equivalencies Calculator." Clean Energy. N.p., July 2015. Web. 10

Longer Lasting

It can last up to four times longer than asphalt.

Higher Home Value

On average, metal roofing helps raise the value of a home by \$1.45 per square foot.

Insurance Savings

You may even qualify for a discount of 15-30% on your homeowners insurance depending on your insurance agency.

Better Resale Value

Up to 95% of cost recouped when selling your home.

Energy Savings

Reflects up to 65% of solar radiation to significantly reduce energy consumption.

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Arlington, TX 76011

Quality Edge Georgia
5520 Export Blvd.
Garden City, GA 31408

Quality Edge Headquarters
2712 Walkent Drive NW
Walker, MI 49544



Sources: www.metalroofing.com
<http://www.bobvila.com/articles/381-metal-roofs-on-the-rise/#.YcUJF1VhBc>



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Front Cover Image: Weathered Canyon