



#### Why metal tile panels?

- Beauty and function Metal roofs look better and last longer,
- Excellent long term investment Lowest cost per annum coverage,
- Fire resistant Class A fire resistant,
- Wind resistant Class A wind resistant (up to 120 mph),
- Light weight Eliminating structures sagging,
- Moisture resistant Treated metal and finishes resist oxidation,
- Stain resistant Mildew resistant, unlike asphalt shingles,
- 100% recyclable materials Environmentally friendly,
- Tax savings Energy tax credits available for metal roofing purchase,
- Insurance savings Homeowner's insurance lower rates,
- No maintenance required.







#### **METAL TILE PANELS:**

Metal tile panels are a graceful and durable roofing material, suitable for most pitched roof applications. They combine the traditional look with the latest technology and can be used on residential and commercial buildings, and for replacing old roofs.

Metal tile panels are made from sheet metal which is zinc-plated on both sides, with several protective layers, which ensures durability. It is one of the most light-weight roofing materials, which is an advantage because it does not require a heavy roof support structure. The weight of the material is particularly important for re-roofing old buildings, since light-weight metal panels do not require reinforcing the supporting structures. One roofing square  $(10' \times 10')$  of metal roof weighs 96 lb., which is about 10 times lighter than clay tiles.



A wide range of colors and applicability of the panels on various roof profiles allow the matching of the roof to the exterior of the building and the surroundings. The length of the tile panels are cut to an optimal size to eliminate wastage and keep the client's cost as low as possible.

Unlike other roof systems, installation of metal roof is quick and inexpensive. The roofing products by DML USA have a 50 year warranty.

#### **SAPPHIRE Metal Panels**

SAPPHIRE Metal Tile Panels can bring your home beauty, durability, and reduced energy costs. Available in 25 colors, this versatile roofing has several advantages over standard asphalt shingles. Many of DML USA clients opt to install metal roofing for reliable protection against sun, wind, snow, and rain without sacrificing a striking visual effect.

The right style of metal roofing will complement any home's architecture, from Victorian to contemporary. This is because the arrangement of the sheets of SAPPHIRE can be completely customized to suit the client's preference, unlike the standard grid of shingles.

SAPPHIRE panels with AkzoNoble Cool Chemistry® finishes reflect a great deal of the sun's energy which over the life of the roof can save substantial energy costs. Light-colored DML USA roof could save 23% in air conditioning expenses in summer.

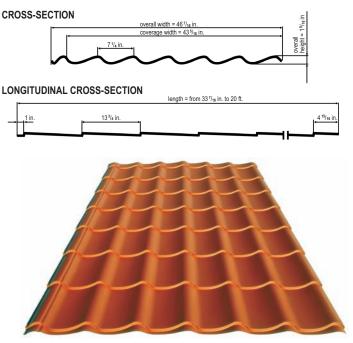
Due to the light weight of material, the need to remove the old roof in most cases is not required thus generating substantial cost savings on installation.

# passivation layer Anti-corrosion premier layer KYNAR 500® finish zinc coat zinc coat passivation layer anti-corrosion premier layer backer

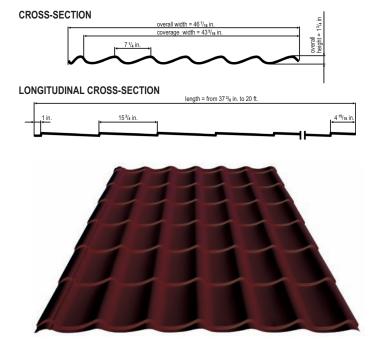
#### Specifications:

- Type of metal:
  - 26 gauge G90 galvanized steel
  - .032 aluminum
- Finish: KYNAR 500® PVDF or HYLAR 5000® PVDF
- Overall width: 46 1/16 in., effective coverage: 43 1/16 in.
- Length: Cut to customer specifications, max. 20 ft
- Weight: 0.96 lb/sq ft
- Colors: 26 of AkzoNoble Cool Chemistry® colors
- Accessories: Same gauge and finish as the panel
- Recommended minimum pitch: 3:12
- May be installed over old shingles or other roofing

#### Sapphire 350



#### Sapphire 400



#### **ACCESSORIES AND ACCENTS**

DML USA provides a wide variety of necessary accessories for metal tile panels, i.e.: snow guards, ridge tiles, fascias and other edges, sealing tapes, touch-up paint, screws and different types of flashing for non-standard applications.

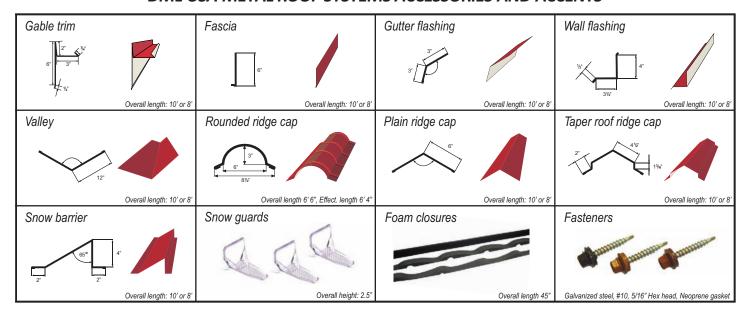






Accents serve as a sealing-finishing element and enhance the aesthetics of the roof. They are made of flat sheet coated steel (in the same color as metal tile panels). There are a lot of finishing solutions, their appearance and dimensions depend to a great extend on the shape and specific features of the roof. Accents shown below are available in either standard dimensions or customized to the needs of the client. Available profiles are made of G90 galvanized steel sheets having the lengths from 6 to 20 feet and 26 gauge thickness.

#### DML USA METAL ROOF SYSTEMS ACCESSORIES AND ACCENTS





## Increased energy efficiency, same reliable performance

DML USA offers SAPPHIRE panels in 25 colors in TRI-NAR® finish applied by AkzoNobel, the manufacturer of complete line of coatings that comply with Energy Star guidelines and are LEED compliant, which help make projects more energy efficient and sustainable.

TRINAR® is AkzoNobel finest exterior metal building finish, consisting of 70% formulations of KYNAR 500® or HYLAR 5000® polyvinylidine fluoride (PVDF) resin.

One of the secrets of TRINAR®'s superior durability lies in the molecular structure of this resin. This unique carbon/fluorine bond is the key to its unsurpassed thermal, chemical and ultraviolet resistance properties. When coupled with AkzoNobel developed premium ceramic/inorganic pigmentation, this system demonstrates remarkable resistance to weathering, fading, cracking and chalking.

#### COOL CHEMISTRY® by AkzoNobel

DML USA colors are available in AkzoNobel COOL CHEMISTRY® Series which contain ceramic infrared reflective pigments. These special pigments are designed to reflect infrared energy while still absorbing visible light energy, thus appearing as the same color yet staying much cooler.

When COOL CHEMISTRY® Series paints are used on DML USA metal roofing system, the result is a sustainable building material that can lower air conditioning costs, reduce peak energy demand, thus lowering costs while protecting natural resources and help reduce pollution.

#### Gloss finish



#### Matte finish





What is ENERGY STAR ?

ENERGY STAR qualified products and practices help you save money and reduce greenhouse gas emissions by meeting strict energy efficiency guidelines set by the U.S. Environmental Protection Agency and the U.S. Department of Energy









The equipment consists of over 100 state of the art machines by **STAM**, **KETLER**, **AMADA**, **DURMA**, **GODENES**, **ITEK INVITA** and **HAYES**. The number of production lines by function is as follows:

- 8 for sheet metal tiles,
- 25 for ribbed steel panels,
- 2 for recessed steel sections,
- 2 for ribbed steel frames.
- 3 for flat sheet metal with cutters,
- 1 for wall panels.

Other equipment used in the product fabrication:

- shears to cut sheet metal into any dimensions required,
- conventional and automated edge benders able to provide complex profiles up to 20 ft. long,
- various cutters for non-standard formats and complex shapes of sheet metal.

Automated production facilities allow precision fabrication which results in high quality products.



# Continuous improvement is achieved by implementing the latest technology.

The production process to manufacture roofing products is handled by 3 gantry cranes over 30 "LINDE" front and side forklifts and special loaders. This equipment ensures the timely movement of materials used throughout the manufacturing process. All production lines and equipment are staffed with experienced and highly trained operators.













In these modern times we must all make an effort to reduce our energy consumption while making sure we are using environmentally responsible, sustainable resources. Using DML USA Metal Roofing System is one of the ways we can achieve this goal.

DML USA Metal Roofing System is the sustainable choice for those who are concerned about human population's effect on our environment. As consumers, many of us are careful to collect our recyclable materials and turn them in for collection. In reality, though, we are offered very few consumer products through which we can "close the loop" by purchasing products that are high in recycled content. Metal roofing however, offers that option to consumers by allowing them to choose a significant building product on the basis of its recycled content. DML USA Metal Roofs contain up to 95% recycled substance. This is in stark contrast to conventional roofing shingles, which have much shorter lives and use oil-based products as their primary raw material.

While DML USA Metal Roofing metal roof product is known for its 50 year warranty, it does have the added benefit of being 100% recyclable if it is ever removed in the future, perhaps as part of a building renovation. Whereas other old roofing materials are disposed of by the ton each year in landfills across the country, the steel used in metal roofing can be recycled in their entirety - even becoming, potentially, another DML USA Metal roof. The recycled content of metal roofing has been a compelling reason for several state and local entities, such as solid waste districts and departments of natural resources, to include metal roofing on their list of "green" and recycled-content products.

Since metal roofs absorb much less heat than other roofing materials there is less impact on the urban air temperature, making a DML USA Metal Roof better for all who live around you by keeping temperatures down. The reduction in air temperature also helps to improve air quality since less smog is formed and less fossil fuels are used to cool the home.

Cool metal roofing may be a relatively new idea in USA, but it is quickly gaining ground as the preferred roofing material for new or re-finished homes. By installing a DML USA Metal Roof you are reducing your energy consumption as you will require less air conditioning in the summer, which of course will save you hundreds of dollars in electric costs.



You are also making a conscious decision to use materials that are environmentally friendly and recyclable, and improving the air quality around your home. With all these advantages it is no surprise that metal roofing is becoming so popular with homeowners, developers and contractors.





# Why is metal roof better than asphalt shingles ?!?

Shingle manufacturers tout product warranties that range from 25-50 years. They use impressive-sounding long-term warranties to convince buyers that their shingles are the best and will last the longest. They compete over such features as the length of coverage, algae resistance, wind tolerance, and whether the warranty can be transferred to a new owner. These warranties are often shingle manufacturers' main selling points!

But don't be taken in by a warranty that sounds too good to be true. Even companies who sell decades-long warranties or lifetime guarantees don't expect your roof to last longer than fifteen years or so. Standard manufacturer's warranties are not worth the paper they're written on.

So, if you're sceptical of asphalt shingle, you can make sure you're better protected the next time you replace your roof. When you are shopping around for a new roof, ask roofers for DML USA Metal Roofing Systems.

### Which roof would you prefer?



Weight: Fair - Average Roof 6,500 lbs. Fire: Poor Ice/Snow: Fair Hail: Poor Wind: Poor - 60 m.p.h. Weathering: Poor - lasting 10-25 years Earthquake: Good

Environment: Poor - Non-recyclable Re-sale: Fair

Weight: Excellent - Average Roof 2,800 lbs.
Fire: Excellent
lce/Snow: Excellent
Hail: Excellent - class 4
Wind: Excellent - 120 m.p.h.
Weathering: Excellent - lasting 60 years
Earthquake: Excellent - Lightweight, Strength
Environment: Excellent - 100% Recyclable
Re-sale: Excellent



