

INSULATED METAL PANELS



PERFORMANCE FROM THE

INSIDE OUT

NUCOR[®]
BUILDINGS GROUP

 **METL
SPAN**[®]
a NUCOR company



POWERFUL
PARTNERSHIPS
POWERFUL
RESULTS

Nucor Buildings Group is one of North America's largest and most experienced manufacturers of custom metal building systems. We're constantly looking for ways to add value to make our Authorized Builders more competitive, including through strategic partnerships.

That's why we're pleased to welcome Metl-Span to the Nucor Buildings Group family. As a leading manufacturer of insulated metal panels, Metl-Span has gained a reputation for outstanding products and exceptional customer service. Metl-Span's comprehensive product line serves a broad range of markets, including the commercial, industrial, manufacturing industries.

With the addition of the Metl-Span product line, and Nucor's Insulated Panel Group's rapidly expanding production capabilities, the Nucor Buildings Group brands are stronger and can serve you even better—delivering cost-effective, single-source solutions that give you a competitive edge.



THE NUCOR/METL-SPAN ADVANTAGE

As a Nucor customer, you now have access to our line of Metl-Span products. There are many benefits to using our insulated metal panels.

Simplification of the Building Process

Having a predictable single-source supplier for your primary materials streamlines the construction process, cutting out the middleman and eliminating needless delays.

Complete Production Control

By adding Metl-Span to the Nucor family, we have complete oversight of your building project's design and production. That ensures you will get what you need when you need it.

Shortened Lead Times

Our manufacturing process and nationwide network of production facilities allow for built-in efficiencies to make fabrication as quick as possible. Plus, with full control of our production schedule, we can offer shortened lead times by adapting our schedule to yours.

Products That Work With Each Other

Using products from many different suppliers on one project can create confusion, or lead to conflicts and construction delays. Nucor and Metl-Span always work hand in hand, so compatibility is assured.

Nucor Quality from the Inside Out

With insulated metal panels coming from Nucor Buildings Group, you know you'll receive the same reliability and service you've come to expect from us. Our success depends on our tireless **FOCUS** on our customers.

FIT (Steel That Fits)

We have the best reputation in the industry for selling steel that fits. We strive to ensure that every job fits together in the field, with no back charges, back orders or shortages.

On Time

We are the industry leader in hitting our delivery commitments. Our customers' building crews can stay on schedule because our deliveries are on time.

Competitive Pricing

We are committed to saving our customers money with our advanced design systems offering flexibility, energy efficiency and speedy construction times.

Unbeatable Service

We are there for our customers when they need us.

Solutions That Work

Each one of our building systems is custom designed and fabricated to meet a customer's unique building needs. Our product is our customer's solution.

INDUSTRY LEADERS

NUCOR®
BUILDINGS GROUP

Leading the industry in technology, design flexibility, quality, and value, Nucor Buildings Group is collectively one of the largest and most experienced manufacturers of custom engineered steel building systems. In addition to offering a full line of custom products, our insulated panels by Metl-Span deliver high-quality, durable and energy-efficient solutions designed for unparalleled performance to stand the test of time.

**METL
SPAN**
a NUCOR company

Metl-Span is a dynamic industry innovator dedicated to manufacturing and providing the highest quality insulated building panel products. Since their origination in 1968, Metl-Span have pioneered the research, design, production and sale of state-of-the-art insulated metal panels for institutional, commercial, and industrial buildings.



WHY INSULATED METAL PANELS (IMPs)

FEATURES & BENEFITS

Our insulated metal panels are ideal for pre-engineered metal building designs for almost any end-use as walls and roofs, saving material and labor costs. Ideal for commercial and industrial metal buildings, other end-use applications include schools, manufacturing facilities, distribution warehouses, community, recreation, aircraft hangars, and office buildings. Here are some of the advantages our insulated panels offer.

PERFORMANCE & DURABILITY

Our panels are comprised of an advanced insulation core that is injected between two pre-finished steel facings, forming a single, all-in-one unit. The result is the most thermally efficient panel available. Wall panels also have a specially formed side joint that permits the hidden application of sealant within recessed grooves, creating an impenetrable water and vapor seal that protects your building against extreme weather.

TIME

Metl-Span panels are pre-fabricated units, shipped to the jobsite ready-to-install in nearly all types of weather.

LABOR COSTS

Insulated metal panels are designed for easy and efficient installation to keep your project on schedule with concealed fastener system in the side joint. It allows quick installation, reducing construction time and getting closed in sooner.

IMPs reduce the amount of labor trades associated with conventional multi-component wall and roof assemblies. IMPs all-in-one construction provides all the necessary thermal, air, vapor and water barriers in a single product.

ENERGY EFFICIENCY

Each insulated metal panel contains an advanced urethane core that provides highly efficient insulation to drive down building energy usage and overall costs.

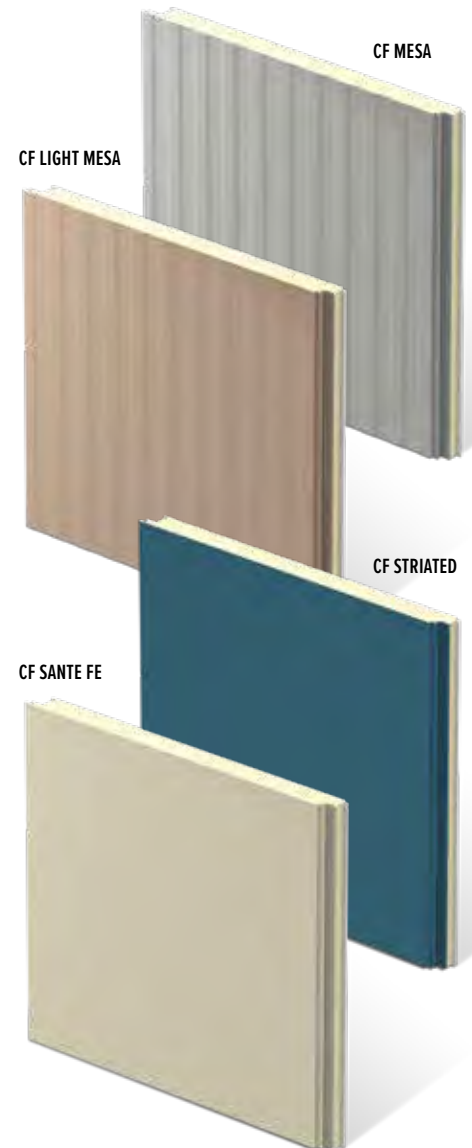
PRESENCE

We strive to offer production dates determined by customer needs, not manufacturer convenience. With manufacturing locations across the United States and Canada, Metl-Span offers faster service to our customers and reduced transportation costs.

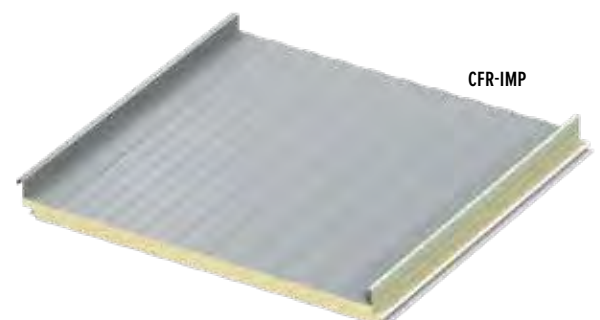
DESIGN FLEXIBILITY

Our panels are available in a variety of flat and corrugated surfaces suitable for exterior walls, interior walls and roofs. They come in multiple profiles that can be used in either horizontal or vertical designs with custom modular widths and corners. Rounding things out is the full range of colors, reveals, and detail accessories that can support or enhance any design.

WALL PANELS



ROOF PANELS



PERFORMANCE FROM THE INSIDE OUT

IMPs are the perfect solution when compared to traditional multi-component built-up systems.

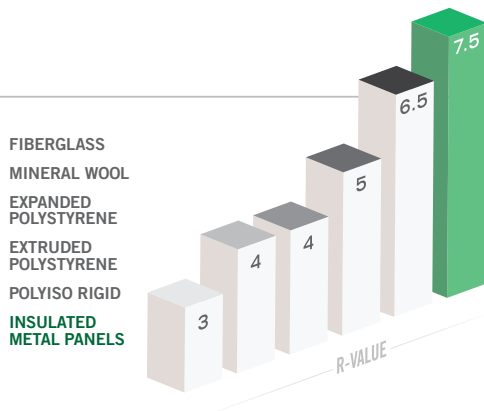


INSTALL ONE, BE DONE



METL-SPAN IMPs CAN BE
ERECTED AT A RATE OF UP TO
5,000 FT² PER 8-HOUR SHIFT
BY A FOUR-MAN CREW

Dry-in your building in record speed and let interior work begin. A single word that captures the essence of Metl-Span IMPs is “efficient,” especially as it applies to installation. Two key installation efficiencies are gained with Metl-Span IMPs – vastly reduced labor and trades. These reductions make Metl-Span IMPs perfect for fast-track construction and translate into significant direct cost savings as well as indirect cost savings from accelerated scheduling.



METL-SPAN IMPs ACHIEVE
GREATER INSULATION R-VALUES
PER INCH THAN BRICK VENEER WALL SYSTEMS

UNMATCHED EFFICIENCY

Metl-Span IMPs provide outstanding long-term air, thermal, water, and vapor control in a single, simple, yet brilliantly engineered panel suitable for any climate. In fact, Metl-Span IMPs are so effective, they are also widely utilized as roofs where performance is even more critical. With robust insulating values up to a staggering R-52.5, Metl-Span IMPs easily meet energy codes for every North American climate zone.



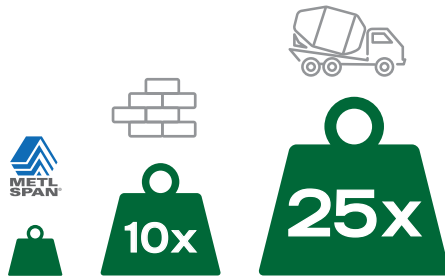
MORE THAN 35% OF
METL-SPAN IMP STEEL IS
MADE FROM RECYCLED STEEL

ENVIRONMENTALLY RESPONSIBLE

Steel is arguably the most recycled material on the planet. More than 35% of Metl-Span IMP steel is made from recycled steel and 88% of scrap steel from panel manufacture is recycled. PUR insulated cores produce no ozone-depleting gas and help make buildings highly energy efficient, reducing reliance on fossil fuels. Metl-Span IMPs have a lower embodied carbon footprint than concrete and mineral wool. Plus, the high R-values of Metl-Span IMPs contribute toward Leadership in Energy and Environmental Design (LEED) green building credits.



LIGHTEN UP



METL-SPAN IMPs ARE AT LEAST
10-25X LIGHTER/FT²
THAN BRICK & PRECAST/TILT-UP CONCRETE

Great things happen when a building design sheds weight by replacing heavy brick, precast, or tilt up concrete with extraordinarily strong but lightweight Metl-Span IMPs. Footings and structural supports are dramatically decreased. Costs are vastly reduced. And life safety – for both construction workers and building occupants – is significantly enhanced.



METL-SPAN IMPs
WITHSTAND NATURAL DISASTERS
THAT OTHER MATERIALS CAN'T

RESILIENT BY NATURE

Floods, hurricanes, earthquakes, and fires: Metl-Span IMPs are uniquely capable of withstanding natural disasters that other materials can't. The panels are made entirely from waterproof materials. Strong dual steel skins protect people and property from airborne debris. The lightweight panels are engineered to accommodate building movement, helping panels to remain in place during seismic events. Plus, Metl-Span IMP systems pass NFPA 285-2019 and are available with non-combustible mineral wool insulation to provide one- to three-hour fire ratings.

FLEXIBLE BY DESIGN



6,000+ UNIQUE PANEL
POSSIBILITIES

WITH METL-SPAN IMPs, ONLY
YOUR IMAGINATION IS THE LIMIT

Metl-Span IMPs are manufactured for a wide variety of markets with modifications, per market, to further maximize their aesthetic and function. Today, Metal-Span delivers wall and roof IMPs for architectural, commercial, industrial, cold storage, and clean room applications. Metl-Span IMPs integrate seamlessly with windows and other building envelope components and materials. Compared to other cladding options, Metl-Span IMPs come in a huge range of shapes, textures, colors, and finishes.

OUR PANELS

PRODUCT SPECIFICATIONS

Due to their excellent insulating and weatherproofing characteristics, as well as their very competitive installation cost, Metl-Span panels are ideally suited for use as walls, ceilings and roofs for commercial, industrial and institutional buildings of virtually any scale, in both new and retrofit construction.





WALL

CF MESA ◻



PANEL SPECIFICATIONS

Width: 30"±, 36", 42"

Thickness: 2", 2½", 3", 4", 5", 6"

Length: NON-DIRECTIONAL EMBOSSED
8'-0" to 32'-0" Horizontal
8'-0" to 52'-0" Vertical
UNEMBOSSED
8'-0" to 16'-0" Horizontal
8'-0" to 40'-0" Vertical

Exterior Profile: Longitudinal corrugations spaced at nominal 4" on center, nominal ⅛" deep, embossed or unembossed

Exterior Face: G-90 galvanized or AZ-50 aluminum-zinc coated steel in 26, 24 and **22 Ga.

Interior Profile: Mesa, nominal ⅛" deep or Light Mesa, nominal ⅙" deep, embossed or unembossed

Interior Face: G-90 galvanized or AZ-50 aluminum-zinc coated steel in 26, 24 and **22 Ga.

Joint: Offset double tongue-and-groove with extended metal shelf for positive face fastening

CF LIGHT MESA ◻ •



PANEL SPECIFICATIONS

Width: 30", 36", 42"

Thickness: 2", 2½", 3", 4", 5"±, 6"±

Length: NON-DIRECTIONAL EMBOSSED
8'-0" to 32'-0" Horizontal
8'-0" to 52'-0" Vertical
UNEMBOSSED
8'-0" to 16'-0" Horizontal
8'-0" to 40'-0" Vertical

Exterior Profile: Lightly profiled ⅙" deep, longitudinal corrugations spaced at nominal 4" on center, embossed or unembossed

Exterior Face: G-90 galvanized or AZ-50 aluminum-zinc coated steel in 26, 24 and 22 Ga.

Interior Profile: Light Mesa, nominal ⅙" deep, embossed or unembossed

Interior Face: G-90 galvanized or AZ-50 aluminum-zinc coated steel in 26, 24 and 22 Ga.

Joint: Offset double tongue-and-groove with extended metal shelf for positive face fastening

◻ Contact your DSM for reveal options. | • Endfolds, factory pre-formed corners and trimless ends available. | ± Center-to-center corrugation spacing, may vary by manufacturing location. | ** Not available in unembossed. | + Not available as an exterior application. | Contact your DSM for custom length availability.



WALL

CF STRIATED ◻ •



PANEL SPECIFICATIONS

Width: 24"* , 30", 36", 42"

Thickness: 2", 2½", 2¾"* , 3", 4"

Length: NON-DIRECTIONAL EMBOSSED
 8'-0" to 32'-0" Horizontal
 8'-0" to 40'-0" for 24", 30", 36" Vertical
 8'-0" to 32'-0" for 42" Vertical
 UNEMBOSSED
 8'-0" to 16'-0" Horizontal
 8'-0" to 16'-0" Vertical

Exterior Profile: Longitudinal striations, nominal 1/32" deep, embossed or unembossed

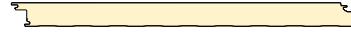
Exterior Face: G-90 galvanized or AZ-50 aluminum-zinc coated steel in 24 and 22 Ga.

Interior Profile: Light Mesa, nominal 1/16" deep, embossed or unembossed

Interior Face: G-90 galvanized or AZ-50 aluminum-zinc coated steel in 26, 24 and 22 Ga.

Joint: Offset double tongue-and-groove with extended metal shelf for positive face fastening

CF SANTA FE ◻ •



PANEL SPECIFICATIONS

Width: 24"* , 30"* , 36", 42"

Thickness: 2", 2½", 2¾"* , 3", 4"

Length: 8'-0" to 32'-0" Horizontal
 8'-0" to 40'-0" Vertical

Exterior Profile: Flat profile with heavy embossing simulates a desert southwestern appearance

Exterior Face: G-90 galvanized or AZ-50 aluminum-zinc coated steel in 24 and 22 Ga.

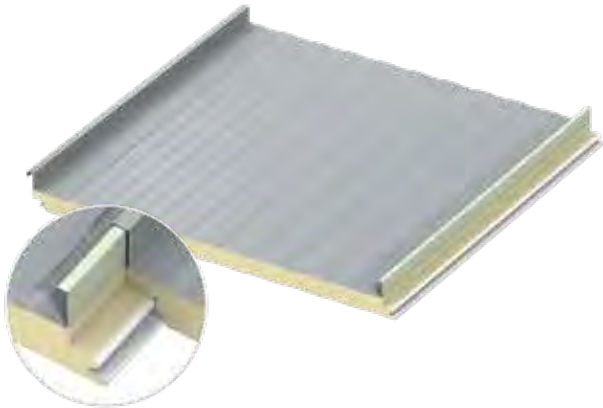
Interior Profile: Light Mesa, nominal 1/16" deep, embossed or unembossed

Interior Face: G-90 galvanized or AZ-50 aluminum-zinc coated steel in 26, 24 and 22 Ga.

Joint: Offset double tongue-and-groove with extended metal shelf for positive face fastening

Reveal: Up to 1" reveal options in ¼", ½", ¾" and 1" increments

◻ Contact your DSM for reveal options. | • Endfolds, factory pre-formed corners and trimless ends available. | ± Center-to-center corrugation spacing, may vary by manufacturing location. | ** Not available in unembossed. | + Not available as an exterior application. | Contact your DSM for custom length availability.



ROOF

CFR-IMP



PANEL SPECIFICATIONS

Width: 30", 36", 42"

Thickness: 2", 2½", 3", 4", 5", 6"

Length: NON-DIRECTIONAL EMBOSSED
9'-6" to 53'-0"

Exterior Profile: 2" high standing seam with a Mesa profile between the seams, embossed

Exterior Face: G-90 galvanized or AZ-50 aluminum-zinc coated steel in 24 and 22 Ga.; or AZ-55 aluminum-zinc coated steel with a clear acrylic coating in 24 Ga.

Interior Profile: Mesa, nominal ⅛" deep, embossed/unembossed

Interior Face: G-90 galvanized or AZ-50 aluminum-zinc coated steel in 26, 24 and 22 Ga.

Joint: Concealed clip mechanically seamed singlelock standing seam at the exterior side joint. The interior side joint is a single tongue-and-groove interlock.

Uplift Performance: UL 90 rated, FM Approvals Standard 4471, and Florida Building Code approved. Dade County NOA.

**K-Factor calculations: Btu in/ft²hr. °F. Contact your DSM for custom length availability.



STANDARD COLORS & COATINGS

Our Polyvinylidene Fluoride (PVDF) paints are more than just color. They are vivid and fade-resistant cool coatings with incredible durability.



EXTERIOR COLORS



Regal White

IR .71 SRI 86



Warm White

IR .65 SRI 78



Surrey Beige

IR .50 SRI 56



Pearl Gray

IR .50 SRI 56



Royal Blue

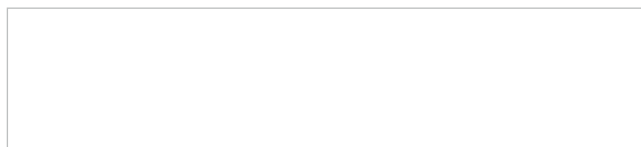
IR .29 SRI 29



Slate Gray

IR .37 SRI 40

INTERIOR COLORS



Igloo White (Polyester)

NOTE: When using field-applied coatings, always order Imperial White Polyester for the exterior coating. Colors shown closely approximate actual coating colors.



Our environmentally friendly cool technology offers the highest quality materials to help you meet your unique requirements while maximizing the life of your building and saving on energy costs.

PVDF is a revolutionary coating system that consists of PVDF resin, acrylic resin and ceramic pigments — giving your panels more vibrant, fade-resistant durability. Its photo-chemical resistance to ultraviolet light helps prevent breakdown from the sun’s rays, reducing heat generation and increasing energy-efficient coolness.

SOLAR REFLECTANCE, THERMAL EMITTANCE AND SOLAR REFLECTANCE INDEX (SRI)

Solar Reflectance

To be considered “cool,” products must have a Solar Reflectance of at least 0.25. Solar Reflectance is the fraction of the total solar energy that is reflected away from a surface.

Thermal Emittance

Thermal Emittance is the measure of a panel’s ability to release heat that it has absorbed.

Solar Reflectance Index (SRI)

Put Solar Reflectance and Thermal Emittance together and you get the Solar Reflectance Index (SRI). SRI is calculated by using the values of solar reflectance, thermal emittance and a medium wind coefficient. The higher the SRI value, the lower its surface temperature and, consequently, the heat gain into the building. Metal roofs coated with pigmented PVDF resin achieve an SRI of 29–86, depending on the color. Conventional roof surfaces have low reflectance (0.05 to 0.25) and high thermal emittance (typically greater than 0.85). Roof panels with both high reflectance and high emittance can reduce the surface temperature by as much as 30–50% based on color and geographic location, which will result in a reduced heat gain to the building, therefore reducing the energy demand.

PVDF COOL COATINGS

PVDF Cool Color	Initial Solar Reflectance (IR)	Initial Thermal Emittance	Solar Reflectance Index (SRI)
Regal White	0.71	0.84	86
Warm White	0.65	0.85	78
Surrey Beige	0.50	0.84	56
Pearl Gray	0.50	0.83	56
Royal Blue	0.29	0.85	29
Slate Gray	0.38	0.87	41



WARRANTIES

At Nucor, we proudly stand behind every product we make. That’s why we offer a 35-year warranty on our PVDF insulated metal panels. It offers protection against:

Fading | Chipping | Peeling | And more

TESTING & CERTIFICATIONS



FM APPROVAL

Metl-Span products carry a standard FM Approval Class 1 certification. The FM Approval certification mark verifies products and services will meet stated conditions of performance, safety and quality useful to the ends of property conservation. Approval criteria for Class 1 are observation of test sample production, performance requirements, marking requirements, examination of manufacturing facilities, audit of quality assurance procedures and a follow-up program.

This FM Approval Class 1 rating ensures your investment is a quality product that consistently performs to the standards specified.

THIRD-PARTY CERTIFICATIONS & LISTINGS FOR CF FOAM PANELS

The panels are certified and listed by third-party agencies and tested in accordance with ASTM E84, ASTM E108, CAN/ULC S101, S102, S107, S126, S134, S138, NFPA 259, NFPA 285 and NFPA 286.

MIAMI DADE COUNTY NOAS

CF wall panels installed vertically or horizontally and CFR roof panels are approved to be installed in the county subject to the conditions of the published notices of acceptance.

STATE OF FLORIDA

Metl-Span CF Series and ThermalSafe panels all have State of Florida product approval.

CITY OF LOS ANGELES RESEARCH REPORT

ICC Evaluation Service Report ESR - 2218, applicable to CF Mesa panels.

ENVIRONMENTALLY CONNECTED

Given today's emphasis on performance-driven building design and construction, Metl-Span's products offer the best solution to help optimize building efficiency for architects, contractors and owners.

Metl-Span, as part of the Nucor family, leads the industry in the development of energy-efficient and cost-effective insulated metal panel systems, through UL-certified and ISO-compliant products. Our company has been dedicated to a cleaner, safer environment since our origination in 1968. As evidence of our leadership in this role, we offer an Environmental Product Declaration (EPD), which provides a detailed analysis of our products' environmental manufacturing footprint, based on an ISO-compliant Life Cycle Assessment (LCA).

Metl-Span's LCA measures the impact of our products on the environment during all phases of their life, from supply chain through the manufacturing process to product use and end of life. ISO LCA standards are applied to accurately report the products' impact on the environment.



DESIGN OPTIONS

APPLICATION

Metl-Span insulated metal panels provide you design flexibility with horizontal and vertical applications. The options to create building curb appeal include panel orientation coupled with a variety of finishes, textures and colors.

COLORS

Insulated metal panels come in a variety of standard colors to meet solar reflective requirements. To ensure a lasting, quality appearance, the exterior face sheet of all Metl-Span insulated metal wall and CFR-IMP panels are treated with a base primer, followed by a premium, full-strength 70% PVDF fluoropolymer coating as standard.

FINISHES

A siliconized polyester coating is available in a limited palette of standard colors for projects where economy is the primary consideration. A wide variety of finishes are available. For more information, contact your local DSM.

DESIGN OPTIONS

- IMPs and Masonry
- Mosaic Patterns
- Color and Profile Variations
- Accent Bands
- Flashings and Extrusions
- Interior Exposed
- Interior Finished

WARRANTY

Metl-Span insulated metal wall and CFR-IMP panels are guaranteed to be free from defects in material and workmanship for a period of two years from the date of substantial completion. Ensuring watertightness and/or vaportightness is a function of the installer and is not covered by the warranty from Metl-Span. Complete standard limited warranty information is available upon request.





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