



INSULATED  
METAL  
PANELS

# COLD STORAGE

PRODUCT SHOWCASE



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**INDUSTRY LEADER**

**INSULATED METAL PANELS**



# METL-SPAN DELIVERS HIGH-QUALITY, DURABLE AND ENERGY-EFFICIENT SOLUTIONS DESIGNED FOR UNPARALLELED PERFORMANCE TO STAND THE TEST OF TIME.

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

We are a championship team that creates great building solutions and achieves proven performance by delivering on our core values and demonstrating our key attributes. Metl-Span ensures you will remain on-time and on-budget with your building projects through our unmatched customer service. Because our employees understand your needs and are committed to your success, we provide you with the tools needed to incorporate our insulated panels into virtually any building design.

# WHY INSULATED METAL PANELS (IMP)

## FEATURES & BENEFITS

### MATERIALS

Metl-Span panels are comprised of an advanced urethane 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 barrier-side joint that permits the hidden application of vapor sealant within recessed grooves, creating an impenetrable water and vapor seal that is protected from the effects of extreme weather.

### TIME

Metl-Span panels offer a single source for the building envelope enclosure, reducing construction time and the number of trades needed for building assembly to save you money and effort.

### LABOR COSTS

Insulated metal panels are designed for easy and efficient installation in order to reduce unnecessary downtime and keep your project on track.

Insulated metal panels reduce additional labor trades needed for building erection, and address thermal, vapor, air and moisture barriers in one 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.

### GLOBAL FOOTPRINT

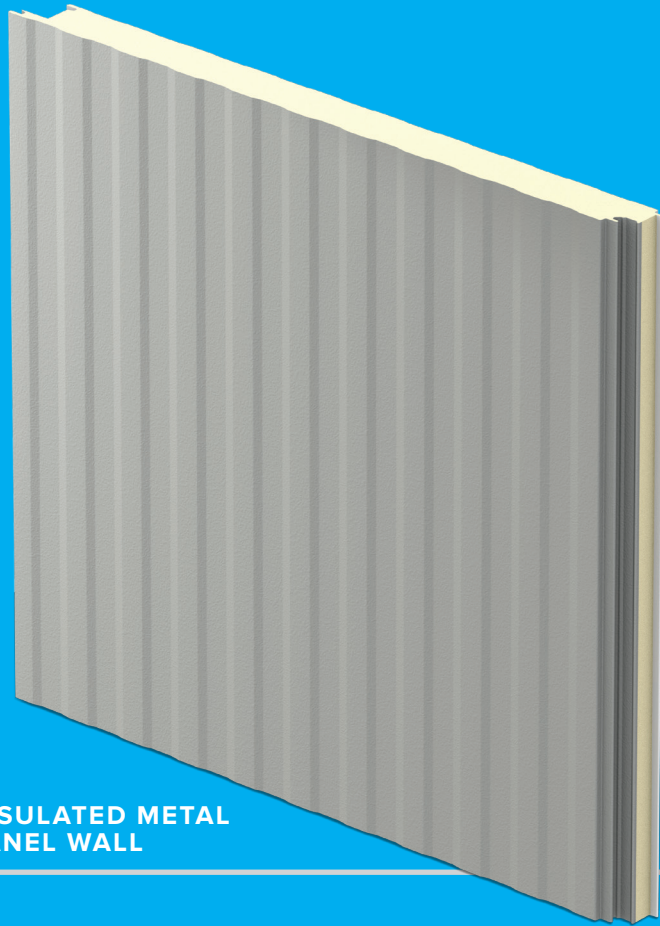
Metl-Span strives to offer production dates determined by customer needs, not manufacturer convenience. With manufacturing locations across the United States and Canada, Metl-Span offers faster service to our customers and reduced transportation costs.

### GREEN STANDARDS

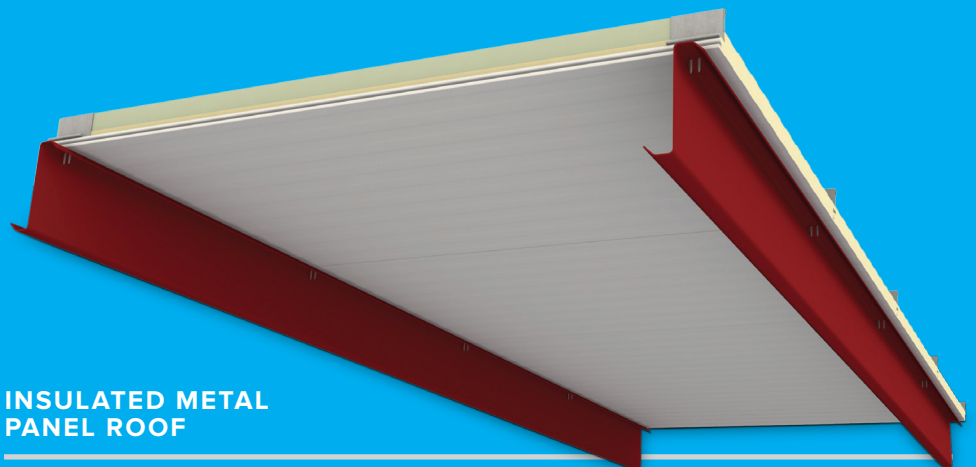
Metl-Span panels are sustainably constructed, qualifying many buildings for credits in the Leadership in Energy and Environmental Design (LEED®) Rating System.

\*ThermalSafe panels are comprised of mineral wool, which provides fire-rating capabilities.

One Step to Code Compliance: IMPs create the perfect envelope solution in one easy step compared to traditional built-up methods.



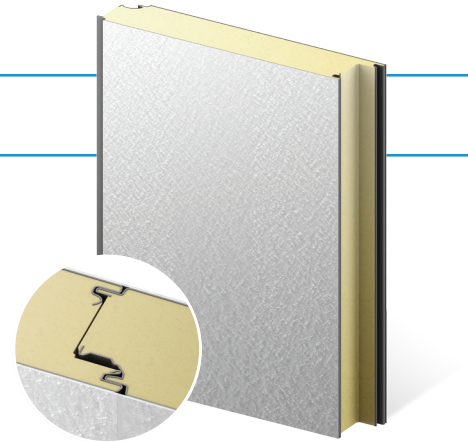
**INSULATED METAL  
PANEL WALL**



**INSULATED METAL  
PANEL ROOF**

# OUR PRODUCTS

## PRODUCT SPECIFICATIONS



Metl-Span panels serve as walls, ceilings and roofs for cooler, freezer and food-processing buildings. In addition, our panels are ideal for dry goods warehouses and other controlled environmental buildings where temperature control and insulation values are critical.

Metl-Span insulated metal panels are manufactured according to exact specifications to assure uniform quality, product consistency and optimized performance. The advanced foamed-in-place panels have a zero ozone-depleting (zero ODP) core. Plus, the faces are textured with stucco embossing and finished with baked-on coatings for added strength.

With Metl-Span panels, you have more profile selections, surface finishes, colors and custom lengths to match all your project specification needs.

### INTERIOR WALL & CEILING SYSTEM

#### FRP CLEANSEAM™

FRP CleanSeam insulated metal panel wall and ceiling systems are specifically engineered to comply with Food Safety Modernization Act (FSMA) and other USDA, FDA and FSIS regulations. CleanSeam enables wall and ceiling panels to join almost seamlessly, preventing an area for mold, mildew or bacteria to grow. Using fiberglass-reinforced plastic (FRP), the panels blend together with a durable, hard seam to eliminate any penetrable space and solidify the panel's structure—ultimately creating a permanent, unbroken seal between panels.

#### PANEL SPECIFICATIONS

**Width:** 42", 44½"

**Thickness:** 2", 2½", 3", 4"

**Length:** 8'-0" to 28'-0"

**Finish:** 0.075" thick, Class A, unembossed FRP  
0.090" thick, Class A, embossed FRP

**Finish Option:** In lieu of FRP finish, one of the faces is available in a Mesa or Light Mesa profile with polyester coating, Igloo White color

**Joint:** Offset double tongue-and-groove. CF 42 has extended metal shelf for concealed fastening within joint

**FRP Joint Sealant:** Two-part compound which chemically welds FRP surfaces for a smooth, durable finish

**Core:** Foamed-in-place, zero ozone depleting (zero ODP) class 1 foam

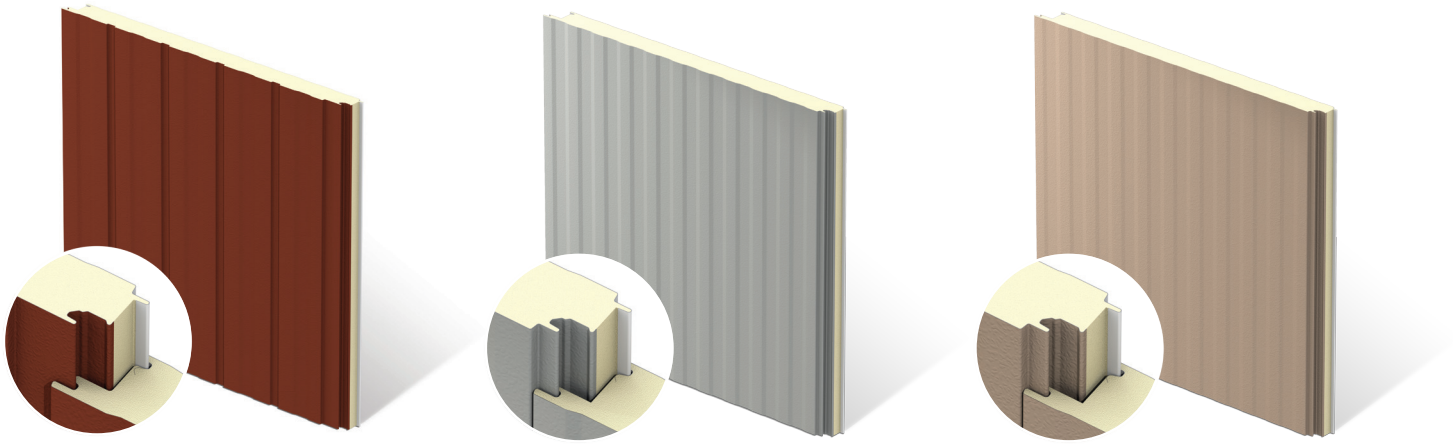
**Thermal Value:** K-Factor\*\* @ 40° F (4.4° C) is 0.126,  
@ 75° F (24° C) is 0.140

**Substrate:** No-profile G-90 galvanized pre-painted steel available in 24 and 22 Ga.

\*\*K-Factor calculations:  
Btu in/ft²hr. °F







## WALL PANELS

### CF FLUTE

CF Flute wall panels provide bold vertical lines complementary to cold storage facilities or food processing buildings. Recommended wall panel profile for the exterior of cold storage buildings.

#### PANEL SPECIFICATIONS

**Width:** 42"

**Thickness:** 2", 2½", 2¾", 3", 4", 5", 6"

**Length:** 8'-0" to 53'-0"

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

**Interior Face:** Mesa profile, Light Mesa profile, stucco-embossed, G-90 galvanized and/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

**Exterior Profile:** Nominal ¼" deep X 1" wide reveals at 8.4" on center with a Mesa profile between the reveals

**Interior Profile:** Nominal ⅛" or ⅙" deep

**Core:** Foamed-in-place, zero ozone depleting (zero ODP) polyurethane, FM Approved Class 1 with no height restrictions

**Thermal Values:** K-Factor\*\* @ 40° F (4.4° C) is 0.126, @ 75° F (24° C) is 0.140

**Fastening:** Fastener and clip concealed in the side joint

### CF MESA

CF Mesa wall panels are attractive and economical. The lightly corrugated profile on both faces of the panel carries symmetry from the building's exterior through its interior, and from room to room in partition installations. This panel may be used for interior wall, and exterior wall and ceiling applications.

#### PANEL SPECIFICATIONS

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

**Thickness:** 2", 2½", 2¾", 3", 4", 5", 6"

**Length:** 8'-0' to 53'-0'

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

**Interior Face:** Stucco embossed, G-90 galvanized and/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

**Exterior Profile:** Nominal ⅛" deep

**Interior Profile:** Nominal ⅛" deep

**Core:** Foamed-in-place, zero ozone depleting (zero ODP) polyurethane, FM Approved Class 1 with no height restrictions

**Thermal Values:** K-Factor\*\* @ 40° F (4.4° C) is 0.126, @ 75° F (24° C) is 0.140

**Fastening:** Fastener and clip concealed in the side joint

### CF LIGHT MESA

Light Mesa wall panels are attractive and economical. The shallower version of the Mesa profile on both faces of the panel carries symmetry from the buildings' exterior through its interior, and from room to room in partition and ceiling installations.

\*Not to be used for exterior cold storage application.

#### PANEL SPECIFICATIONS

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

**Thickness:** 2", 2½", 2¾", 3", 4"

**Length:** 8'-0' to 53'-0'

**Exterior Face:** Light Mesa Profile. Stucco embossed, G-90 galvanized and/or AZ-50 aluminum-zinc coated steel in 26, 24 and 22 Ga.

**Interior Face:** Stucco embossed, G-90 galvanized and/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

**Exterior Profile:** Nominal ⅙" deep

**Interior Profile:** Nominal ⅛" or ⅙" deep

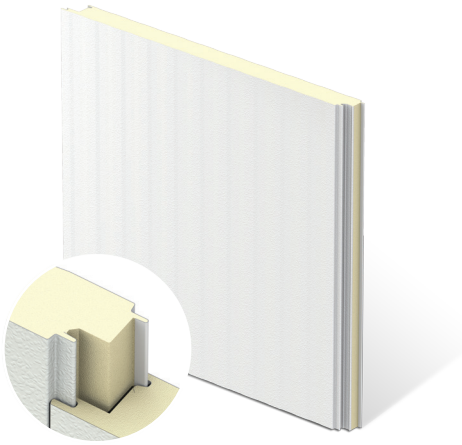
**Core:** Foamed-in-place, zero ozone depleting (zero ODP) polyurethane, FM Approved Class 1 with no height restrictions

**Thermal Values:** K-Factor\*\* @ 40° F (4.4° C) is 0.126, @ 75° F (24° C) is 0.140

**Fastening:** Fastener and clip concealed in the side joint

\*Available only from Nevada plant

\*\*K-Factor calculations: Btu in/ft²hr. °F



## INTERIOR WALL PANELS

### CF PARTITION

CF Partition wall panels have a lightly corrugated profile on both faces, ensuring symmetry between rooms. These panels are well suited for partition wall applications, ideal for liner panels inside concrete buildings and make excellent finished ceilings in cold storage and processing facilities.

#### PANEL SPECIFICATIONS

**Width:** 44½"

**Thickness:** 2", 2½", 2¾", 3", 4", 5", 6"

**Length:** 8'-0" to 53'-0"

**Exterior Face:** Stucco-embossed, G-90 galvanized and/or AZ-50 aluminum-zinc coated steel in 26, 24 and 22 Ga. Optional smooth-unembossed or stainless steel finish

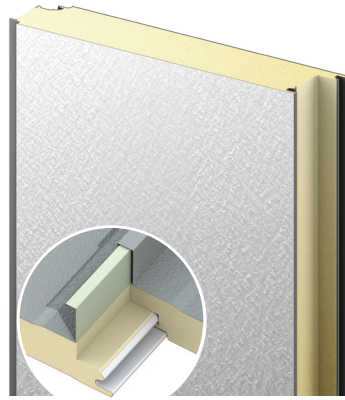
**Exterior Profile:** Nominal ⅛" or ⅙" deep

**Interior Profile:** Nominal ⅛" or ⅙" deep

**Interior Face:** Mesa profile, Light Mesa profile, stucco-embossed, G-90 galvanized and/or AZ-50 aluminum-zinc coated steel in 26, 24 and 22 Ga. optional stainless steel finish

**Joint:** Offset double tongue-and-groove (the extended metal shelf is eliminated on the CF Partition panel)

**Thermal Values:** K-Factor\*\* @ 40° F (4.4° C) is 0.126, @ 75° F (24° C) is 0.140



## ROOF PANELS

### CFR ROOF

The CFR roof panel is an insulated metal standing seam roof panel and is the newest innovation in all-in-one composite roof panel design. The single element roof panel combines durable exterior and interior steel faces with Metl-Span's unmatched zero ozone depleting (zero ODP) polyurethane core.

#### PANEL SPECIFICATIONS

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

**Thickness:** 2", 2½", 2¾", 3", 4", 5", 6"

**Length:** 8'-0" to 53'-0"

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

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

**Joint:** Mechanically closed single-lock standing seam at the exterior side joint. The interior side joint is a single tongue-and-groove interlock

**Exterior Profile:** 2" high-standing seam; Mesa profile between the seams

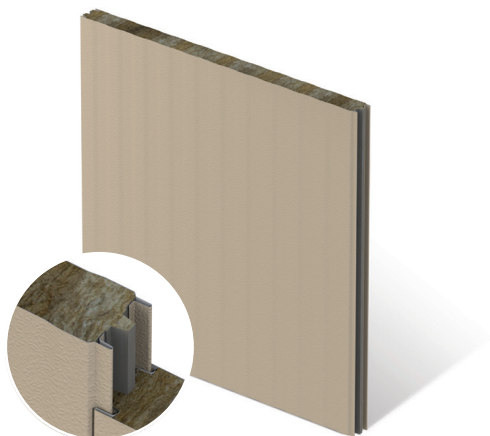
**Interior Profile:** Mesa profile, nominal ⅛" deep

**Core:** Foamed-in-place, zero ozone depleting (zero ODP) polyurethane, FM Approved Class 1

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

**Thermal Values:** K-Factor\*\* @ 40° F (4.4° C) is 0.126, @ 75° F (24° C) is 0.140

\*Available only from Nevada plant



## FIRE RESISTANCE

### THERMALSAFE® & THERMALSAFE NON-EXPOSED FASTENER (NEF)

The ThermalSafe insulated metal panel combines advanced design with Metl-Span's sophisticated manufacturing expertise to create a composite panel with a core made from non-combustible structural mineral wool boards processed to maximize compressive strength. This fire-rated panel has superior structural characteristics and span capability.

See Testing & Certifications page for fire-resistance ratings.

#### PANEL SPECIFICATIONS

**Width:** 42"

**Thickness:** Nominal 3", 4", 5", 6", 7", 8"

**Length:** 8'-0" to 40'-0", variable by thickness; contact Metl-Span for exact maximum length for each thickness

**Exterior Face:** Ultra Light Mesa with regular embossing or Stucco-embossed, Santa Fe profile, G-90 galvanized and/or AZ-50 aluminum-zinc coated steel in 26 and 24 Ga.

**Interior Face:** Stucco-embossed, Ultra Light Mesa profile, G-90 galvanized and/or AZ-50 aluminum-zinc coated steel in 26 and 24 Ga.

**Weight, 26 Ga. Faces:** 4" is 4.65 PSF, 5" is 5.49 PSF, 6" is 6.21 PSF, 7" is 6.92 PSF, 8" is 7.63 PSF.

**Joint:** Exclusive LockGuard® side joint has a flush, double tongue-and-groove connection of the metal faces with an advanced integral spine to join the mineral wool core

**Exterior & Interior Profile:** Ultra Light Mesa nominal 1/32" deep

**Core:** Non-combustible, rigid mineral wool lamellas. Mineral wool fibers are oriented perpendicular to the panel faces for maximum structural strength

**Thermal Values:** K-Factor\*\* @ 75° F (24° C) is 0.275

**R-Value:** The core insulating properties are 3.61 "R" per inch

**Fastening:** Available with either through-fastening across the width of the panel to the support framing or non-exposed fastening (NEF) by securing through the back of the panel for a flush visual appearance

Consult fire-resistant listings for fastener types and spacing. Fastening patterns may vary depending on specific windload and fire-resistant requirements.

\*No hourly rating available

\*\*K-Factor calculations: Btu in/ft<sup>2</sup>hr. °F



PROJECT: KETTLE CUISINE

# 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 you get 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.

## FIRE-RESISTANCE TESTS (THERMALSAFE ONLY)

FM Approval Standard 4880 internal wall and ceiling panels, ASTM E119, CAN/ULC S101, UL 263

The ThermalSafe product offers one-, two- and three-hour fire resistance for non-load-bearing walls and a 90-minute fire-resistance rating for a non-load-bearing ceiling.

- 4" thickness offers one-hour fire resistance wall listing at UL and Intertek
- 6" thickness offers two-hour fire resistance wall listing and a 90-minute ceiling listing at Intertek
- 7" thickness offers two-hour fire resistance wall listing at UL
- 8" thickness offers three-hour fire resistance wall listing at UL and Intertek

## 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 Flute, CF Mesa, and CF Partition 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 NCI Group, Inc., leads the industry in the development of energy-efficient and cost-effective insulated metal panel systems, through UL-certified 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

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## INTERIOR COATINGS & SURFACES

To ensure a lasting, quality appearance, the interior face is treated with USDA-compliant Igloo White. For more aggressive environments, a USDA-compliant PVC Plastisol is offered. No warranty is offered for painted interior surfaces of the panel. For food processing areas, a USDA-compliant stainless steel panel is available as well.

## EXTERIOR COATINGS & SURFACES

To ensure a lasting, quality appearance, the exterior face is coated with a siliconized polyester paint finish in three standard colors. A premium PVDF fluoropolymer finish is available for projects where there are aesthetic considerations for the building exterior. All exterior finishes come with a superior minimum 20-year warranty for coating adhesion, chalking and fade resistance.

## TRIM

Flashing and trim are available in brake formed sheet metal in the same thickness and finish to match the panels.

## IN-HOUSE PRE/POST SALES SERVICES OFFERED

- Drafting/Technical Services
- Certified Installer Training
- On-Site Field Training

## COLORS

Insulated metal panels come in a variety of standard colors to meet solar reflective requirements. For a complete list of our standard colors, please review our color chart. We also do custom colors and color matching. For more information regarding specific colors, please contact a local representative.

\*Color selection is limited for all cold storage refrigerated applications due to temperature differentials and should be carefully reviewed with Metl-Span on a job-to-job basis.

## FINISHES

To ensure a lasting, quality appearance, the exterior face sheet of all Metl-Span insulated metal wall, CFR and ThermalSafe® mineral wool panels are treated with a base primer, followed by a premium, full-strength 70% PVDF fluoropolymer coating. A siliconized polyester coating is available in a limited palette of standard colors for projects where economy is the primary consideration. For specific information about our available colors and coatings, visit [metlspan.com](http://metlspan.com).

## WARRANTY

Metl-Span insulated metal wall, CFR and ThermalSafe® 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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Descriptions and specifications contained herein were in effect at the time this publication was approved for printing. In a continuing effort to refine and improve products, Metl-Span reserves the right to discontinue products at any time or change specifications and/or designs without incurring obligation. To ensure you have the latest information available, please inquire or visit our website at [metlspan.com](http://metlspan.com).



**Metl-Span: Performance Redefined**  
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