METL-SPAN INSULATED METAL PANELS



PIONEERING INSULATED METAL PANEL TECHNOLOGY

CF ARCHITECTURAL INSULATED METAL WALL PANEL

Metl-Span is dedicated to manufacturing and marketing the finest insulated building panel products. As a pioneer in insulated metal panel development for over 40 years, we continue to make many of the product design innovations and technology improvements that shape industry standards. We are constantly expanding our research and process capabilities to provide the highest quality product.

1890 . II II . Ca

Metl-Span insulated metal panels are manufactured to exacting specifications to assure uniform quality and product consistency. The panels have an advanced urethane core with zero ozone depleting properties that is injected in-line between two steel face sheets. The all-in-one single element panels for wall, partition, ceiling and roof applications are economical, offer unlimited design flexibility, are durable and quick to install.





The Metl-Span CF Architectural wall panel is ideal for high-profile architectural applications. The panels may be installed either vertically or horizontally for maximum design impact. Attached with concealed clips and fasteners in the side joint, CF

Architectural wall panels provide a beautiful flush appearance. Available features for the CF Architectural wall panel include custom widths and varying side joint reveals of ¹/₄", ¹/₂", ³/₄" and up to 3" in ¹/₂" increments for the horizontally applied panel. Other specialty features that can be incorporated into the wall design include curved and radius panels, and integrated windows for unlimited variations and dramatic building designs.

FEATURES & BENEFITS

Metl-Span's foamed-in-place technology offers the most thermally efficient architectural panel available today. Unlike more traditional insulation products, Metl-Span insulated metal panels are placed outboard of the structural supports. This creates a continuous thermal barrier for maximum thermal efficiency. There are no areas where the insulation is compressed or thermal bridges are created.

CF Architectural wall panels have a specially formed barrier side joint that permits hidden application of the vapor sealant within recessed grooves. This design innovation protects the sealant from the harmful effects of extreme weather, will not attract dirt and provides for an impenetrable water and vapor seal.



HORIZONTAL APPLICATION

Trimless ends complement the high profile appearance of horizontally installed panels. The vertical joint in horizontal applications of the CF Architectural wall panel utilizes a dry gasket that helps maintain a clean weathertight seal and remains in-place even under the most severe weather conditions.



HORIZONTAL INSTALLATION

Coordinated with a variety of module widths, reveals, numerous standard colors and post fabrication choices, the CF Architectural wall panel creates virtually limitless building design options.

When applied horizontally, CF Architectural wall panels combine beautifully with the Metl-Vision[®] window system.

PANEL SPECIFICATIONS:

MODULE WIDTH: 24", 30", 36"

THICKNESS: 2", 2 ¹/₂", 3", 4"

LENGTHS: 8'- 0" to 32'- 0"

EXTERIOR FACE: Stucco embossed, G-90 galvanized and/or AZ-50 aluminum-zinc coated steel in 22 Ga.

INTERIOR FACE: Mesa or Light Mesa profile, stucco embossed, G-90 galvanized and/or AZ-50 aluminum-zinc coated steel in 26 Ga., 24 Ga. and 22 Ga.

PANEL JOINT: Offset double tongue and groove with extended metal shelf for positive face fastening



METL-VISION® WINDOW SYSTEM



METL-VISION CROSS SECTION

PRODUCT SPECIFICATIONS:

Metl-Vision windows integrate with 2" and 3" thick Metl-Span CF wall panels and have an overall window frame depth of 4" and 5", respectively.

Sight line for the head, jamb and vertical mullion is 3". The horizontal mullion is 3 $\frac{1}{4}$ " and the sight line for the sill is $3^{11}/16$ ".

Reveals at the head and sill are controlled by the panel joint.

The glazing pocket is designed to receive 1" insulated glass.

Standard finishes are available that include painted and anodized.

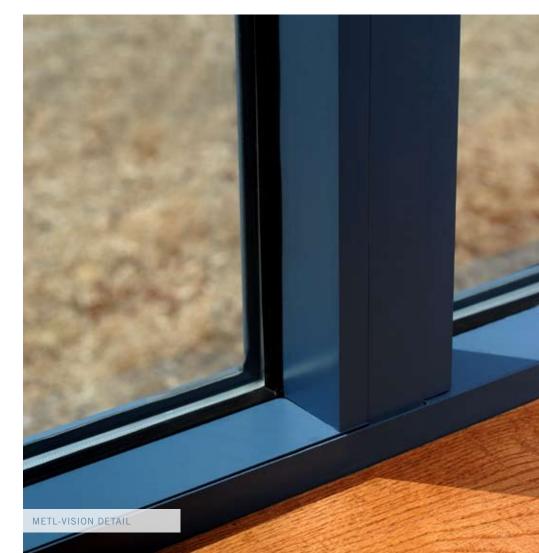
Custom interior treatments for the head, sill and mullions can be designed to integrate with the Metl-Vision system.

Metl-Vision® is the first window system with a flush frame design to fully integrate with the Metl-Span CF horizontal wall panel joint to ensure a weather-resistant installation. The finished assembly eliminates interface problems common with standard windows mated to Metl-Span CF wall panels. Horizontal and vertical mullions can be used to create single, double and four lite strip window designs.

FEATURES & BENEFITS

The completely integrated Metl-Vision window system is thermally broken to minimize conductivity of hot and cold. Sight lines are kept to a minimum to enhance the beauty of the finished window/wall system.

Metl-Vision windows in combination with horizontally applied Metl-Span CF wall panels have been rigorously tested for water and air infiltration and structural integrity so they meet the criteria expected of high performance window designs.



TUFF-CAST[™] PANEL

07 40 00/MET BuyLine 7344



Tuff-Wall[®] is an exceptionally attractive stucco-like insulated metal wall panel, whereas Tuff-Cast[™] provides an appearance of finished precast concrete. Both panels exhibit the natural beauty that designers and owners prefer. The exterior surface of both products is highlighted by the Tuff-Cote[®] fiber reinforced polymer coating. Unlike similar factory applied and all field applied stucco coatings that are left to air dry, the Tuff-Cote finish is heat cured under factory-controlled conditions ensuring maximum bond to the metal surface.

FEATURES & BENEFITS

Tuff-Wall and Tuff-Cast combine the masonry look of stucco and finished precast concrete walls with the thermal efficiency of an insulated metal panel.

The durable finish on Tuff-Wall and Tuff-Cast panels is highly resistant to impact and abrasion and maintains its attractive color for many years.

Field-tested and proven Tuff-Cote finish technology comes with a ten (10) year limited finish warranty.

The stucco and precast textures conform to the aesthetic demands required by many communities and business developments around the country.

Tuff-Wall and Tuff-Cast panels can be erected in virtually any weather condition since the Tuff-Cote finish is unaffected by damp or cold weather, unlike field-applied stucco materials.



PANEL SPECIFICATIONS:

MODULE WIDTH: 36", 42"

THICKNESS: 2", 2 1/2", 3", 4", 5", 6"

LENGTHS: 8'- 0" to 40'- 0"

EXTERIOR FACE: Stucco embossed, G-90 galvanized and/or AZ-50 aluminumzinc coated steel in 26 Ga., 24 Ga. and 22 Ga. with factory applied Tuff-Cote finish system

EXTERIOR TEXTURE: Tuff-Cote finish system - a hard aggregated fiberreinforced polymer coating

INTERIOR FACE: Mesa or Light Mesa profile, stucco embossed, G-90 galvanized and/or AZ-50 aluminum-zinc coated steel in 26 Ga., 24 Ga. and 22 Ga.

PANEL JOINT: Offset double tongue and groove with extended metal shelf for positive face fastening













USES & APPLICATIONS

In new and retro-fit construction, Metl-Span panels function as walls, ceilings and roofing for all types of architectural, commercial and industrial applications. They are ideally suited for:

ARCHITECTURAL

- Low and Mid-Rise Offices
- Mid-Rise Office Spandrel Panels
- Convention Centers
- Performing Arts Centers
- Arenas
- Airport Terminal Buildings
- Schools & Universities
- Religious Facilities
- Hospitals

COMMERCIAL & INDUSTRIAL

- Retail Buildings
- Hangars
- Prison Facilities
- Equipment Maintenance Buildings
- Manufacturing Facilities
- Warehouses
- Distribution Centers
- Self-Storage Complexes
- Utility Buildings
- Controlled environment buildings where temperature control and insulation values are critical.

All Metl-Span panels can be easily adapted to pre-engineered metal building designs for almost any end-use as walls and roofing, saving material, time and labor costs.

FEATURES & BENEFITS

Metl-Span profiled panels with a urethane foam core have a standard FM Class I approval and offer the best insulating values available today.

The panels are lightweight and quick to install providing significantly reduced construction time.

Double tongue & groove offset side joint permits concealed fastening for an attractive architectural appearance.

Consistent insulating values are achieved across the entire area of the wall with built-in thermal breaks helping save energy.

The metal and foam composite construction creates a rigid panel far stronger than the individual parts. This increases the span capability of the panels and reduces the need for secondary structural steel components.



CF & CFI PROFILED WALL PANELS

CF & CFI STRIATED WALL PANEL

Metl-Span CF and CFI Striated wall panels are an attractive and economical alternative to typical flat wall panels.

The exterior face is lightly profiled with narrow longitudinal striations to a nominal ¹/₃₂-inch depth and exhibits a virtual flat appearance from a short distance away. The CF Striated wall panel is an exceptional value combining the aesthetics of a flat wall panel and high insulation values of a urethane core.

PANEL SPECIFICATIONS

MODULE WIDTH: For the CF panel: 30", 36", 42"; For the CFI panel: 42"

THICKNESS: 2", 2 $\frac{1}{2}$ ", 3" (2 $\frac{3}{4}$ " thickness also available from Nevada plant)

LENGTHS: 8'-0" to 40'-0" for the 30" & 36" widths, 8'-0" to 32'-0" for the 42" width

EXTERIOR FACE: Stucco embossed, G-90 galvanized and/or AZ-50 aluminumzinc coated steel in 24 Ga. and 22 Ga.

INTERIOR FACE: Mesa or Light Mesa profile, stucco embossed, G-90 galvanized and/or AZ-50 aluminum-zinc coated steel in 26 Ga., 24 Ga. and 22 Ga.

PANEL JOINT: Offset double tongue and groove with extended metal shelf for positive face fastening

CF & CFI MESA, LIGHT MESA & PARTITION WALL PANEL

The Metl-Span CF and CFI Mesa, Light Mesa and Partition wall panels are well suited for exterior wall and interior partition wall applications.

The lightly corrugated profile on both faces of the panel ensures symmetry from outside the building to inside, and from room to room in partition applications.

PANEL SPECIFICATIONS

MODULE WIDTH: For the CF Mesa and Light Mesa wall panel: 36", 42"; For the CF Partition wall panel: 44 ¹/2"*; For the CFI Mesa, Light Mesa and Partition wall panels: 42"

THICKNESS: CF Mesa and CFI Mesa profiles, 2", 2 $^{1}\!\!/_2$ ", 3", 4", 5", 6"; CF Light Mesa profile, 2", 2 $^{1}\!\!/_2$ ", 3", 4"

(2 $^{3}\!\!/_{4}"$ thickness also available from Nevada plant)

LENGTHS: For the CF panels 8'- 0" to 53'- 0"; For the CFI panels 8'- 0" to 50'- 0"

EXTERIOR FACE: Stucco embossed, G-90 galvanized and/or AZ-50 aluminum-zinc coated steel in 26 Ga., 24 Ga. and 22 Ga.

INTERIOR FACE: Mesa or Light Mesa profile, stucco embossed, G-90 galvanized and/or AZ-50 aluminum-zinc coated steel in 26 Ga., 24 Ga. and 22 Ga.

PANEL JOINT: Offset double tongue and groove with extended metal shelf for positive face fastening.

* The extended metal shelf is eliminated on the Partition wall panel.

CF & CFI FLUTED WALL PANEL

The ribbed profile of the Metl-Span CF Fluted wall panel provides bold vertical lines complementary to almost any commercial or industrial building.

Like the other Metl-Span CF panels, the fluted design is installed with concealed clips and fasteners in the side joint.

PANEL SPECIFICATIONS

MODULE WIDTH: 42"

THICKNESS: 2", 2 $\frac{1}{2}$ ", 3", 4", 5", 6" (2 $\frac{3}{4}$ " thickness also available from Nevada plant)

LENGTHS: For the CF panels 8'- 0" to 53'- 0"; For the CFI panels 8'- 0" to 50'- 0"

EXTERIOR FACE: Stucco embossed, G-90 galvanized and/or AZ-50 aluminum-zinc coated steel in 26 Ga., 24 Ga. and 22 Ga.

INTERIOR FACE: Mesa or Light Mesa profile, stucco embossed, G-90 galvanized and/or AZ-50 aluminum-zinc coated steel in 26 Ga. and 24 Ga.

PANEL JOINT: Offset double tongue and groove with extended metal shelf for positive face fastening

17 R

CF & CFI PROFILED INSULATED METAL WALL PANELS

MORE CF & CFI PROFILED WALL PANELS

CF & CFI SANTA FE[®] WALL PANEL

The Metl-Span CF and CFI Santa Fe[®] wall panels have a flat exterior profile with a heavy stucco embossed texture that mimics the look of a conventional masonry stucco finish. The high profile of the exterior face is further enhanced with fasteners and clips, used to attach the panel to the structure, which are concealed within the side joint.

PANEL SPECIFICATIONS

MODULE WIDTH: 42"

THICKNESS: 2", 2 ¹/₂", 3", 4" (2 ³/₄" thickness also available from Nevada plant)

LENGTHS: For the CFI panels, 8'-0" to 32'-0"; For the CF panels, 8'-0" to 40'-0"

EXTERIOR FACE: Heavy stucco embossed, G-90 galvanized and/or AZ-50 aluminumzinc coated steel in 26 Ga., 24 Ga. and 22 Ga.

INTERIOR FACE: Mesa or Light Mesa profile, stucco embossed, G-90 galvanized and/or AZ-50 aluminum-zinc coated steel. For CF panels: 26 Ga., 24 Ga. and 22 Ga.; For CFI panels: 26 Ga. and 24 Ga.

PANEL JOINT: Offset double tongue and groove with extended metal shelf for positive face fastening



CFI METL-PLANK™ WALL PANEL

The Metl-Span CFI Metl-Plank[™] wall panel is ideal for the exterior of commercial and industrial buildings. Metl-Plank wall panels install quickly and economically with concealed side joint fasteners.

The attractive longitudinal planking breaks up the flat expanse of metal on large-scale buildings.

PANEL SPECIFICATIONS

MODULE WIDTH: 42"

THICKNESS: 2", 2 ¹/₂", 3", 4", 5", 6"

Lengths: 8'- 0" to 50'- 0"

EXTERIOR FACE: Stucco embossed, G-90 galvanized and/or AZ-50 aluminum-zinc coated steel in 26 Ga. and 24 Ga.

INTERIOR FACE: Mesa or Light Mesa profile, stucco embossed, G-90 galvanized and/or AZ-50 aluminum-zinc coated steel in 26 Ga. and 24 Ga.

PANEL JOINT: Offset double tongue and groove with extended metal shelf for positive face fastening



7.2 INSUL-RIB[™] WALL PANEL

The 7.2 Insul-Rib[™] wall panel combines a traditional 7.2["] rib panel design with a urethane foam core. For the first time, this widely used profile is now available with exceptional insulating properties in various thicknesses.

PANEL SPECIFICATIONS

MODULE WIDTH: Nominal 36"

THICKNESS: 2 1/2", 3", 4", 5", 6"

LENGTHS: 8'- 0" to 50'- 0"

EXTERIOR FACE: Stucco embossed, G-90 galvanized and/or AZ-50 aluminum-zinc coated steel in 26 Ga., 24 Ga. and 22 Ga.

INTERIOR FACE: Mesa or Light Mesa profile, stucco embossed, G-90 galvanized and/or AZ-50 aluminum-zinc coated steel in 26 Ga., 24 Ga. and 22 Ga.

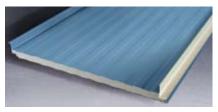
PANEL JOINT: Offset double tongue and groove with extended metal shelf for positive face fastening



CFR INSULATED METAL ROOF PANEL

Metl-Span CFR is an insulated metal standing seam roof panel and is the foremost innovation in all-in-one composite panel design, combining durable interior and exterior faces with Metl-Span's unmatched polyurethane core. The CFR insulated metal standing seam roof panel is a truly unique answer to many deficiencies common with metal standing seam panels of the past.

The CFR roof panels have wide coverage areas between side joint connections and a mechanically closed standing seam that is 2" high. Profiling between the seams is a Mesa pattern with stucco embossing for added strength and superior appearance.



Panels are attached to the structure with clips and fasteners concealed in the side joint to ensure maximum watertightness.

The CFR roof panel's diaphragm strength can be integrated into many steel-framed building bracing designs by attaching

panels with Metl-Span's exclusive Clinch Clip[®]. Adjacent roof panels are interlocked without fastener penetrations that compromise weather tightness or costly below-roof installation. Diaphragm strength and shear stiffness data are available in the CFR roof panel diaphragm strength technical bulletin, which is accessible on the Metl-Span web site in the document section.

UNIQUE FEATURES & BENEFITS

The CFR roof panel provides exceptional benefits including a standing seam exterior face for unsurpassed weathertight performance. The expansive panel width options contribute to installation savings because there are fewer side joints to seal. CFR roof panels are installed completely from the top side with concealed clips and fasteners placed in the side joint. Factory cut panel ends, factory notching and factory swaged ends eliminate critical and extensive field reworking and reduce erection costs. Factory installed backer plates at the endlaps also eliminate pre-drilling for special fasteners and fastener tools.

Careful design parameters have enabled Metl-Span to create an incomparable roof system that is easily and quickly installed without dependence on highly skilled labor.

PANEL SPECIFICATIONS

6

MODULE WIDTH: 30", 36", 42"

EXTERIOR PROFILE: 2" high standing seam with a Mesa profile between the seams

anananananan

INTERIOR PROFILE: Mesa profile, nominal $^{1}\!/\!\!s^{\scriptscriptstyle \rm T}$ deep

THICKNESS: 2", 2 ¹/₂", 3", 4", 5", 6"

LENGTHS: Standard 8'- 0" to 53'- 0"; Contact Metl-Span for custom length availability

EXTERIOR FACE: Stucco embossed, G–90 galvanized and/or AZ-50 aluminumzinc coated steel in 24 Ga. and 22 Ga., or AZ-55 aluminum-zinc coated steel with a clear acrylic coating in 24 Ga. and 22 Ga.

INTERIOR FACE: Stucco embossed, G–90 galvanized and/or AZ-50 aluminum-zinc coated steel in 26 Ga., 24 Ga. and 22 Ga.

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

UPLIFT PERFORMANCE: UL 90 rated, Factory Mutual 4471, FM 1-90 windstorm and Florida Building Code approved. Dade County NOA No. 09-0310.10



THERMALSAFE[®] FIRE-RESISTANT INSULATED PANEL

USES & APPLICATIONS

ThermalSafe fire resistant insulated panels are ideal for industrial buildings like manufacturing plants, auxiliary buildings at refineries and other at risk for fire building installations.

Warehouses of all types are excellent structures for mineral wool panels, where they can be installed as exterior fire resistant separation walls or as fire partitions and barriers inside tilt-up buildings that contain multiple tenant leased space. High occupancy structures like sports arenas and gymnasiums, cold storage warehouses, bakeries and other food processing facilities are well suited for ThermalSafe panels.





BYU PRACTICE STADIUM EXTERIOR AND INTERIOR



Metl-Span's ThermalSafe® product is a fire resistive insulated panel consisting of metal facings bonded to a structural mineral wool core. ThermalSafe combines the latest technology in panel design with Metl-Span's advanced manufacturing

expertise to create a composite panel that achieves one, two and three hour fire resistance ratings for non-load bearing walls and a ninety (90) minute fire resistance rating for a non-load bearing ceiling.

ThermalSafe panels with the exclusive LockGuard[®] side joint have one, two and three hour fire resistance ratings without installation of field-applied silicate splines in the panel joint. This unique design speeds the installation process and enhances the fire resistance characteristics of the panel.

ENVIRONMENTALLY FRIENDLY

ThermalSafe panels are made from recyclable raw materials. The mineral wool core is a natural product that contains no VOCs and CFCs that affect the ozone layer or add to global warming potential. No poisonous gases are released during a fire.

FEATURES & BENEFITS

ThermalSafe's structural mineral wool core resists high temperatures and will not burn, thus providing excellent fire resistant qualities.

Fire resistant exterior and interior walls can be installed in one step with ThermalSafe mineral wool panels. You eliminate multiple steps associated with the installation of concrete block or numerous layers of gypsum wallboard. They provide good thermal performance and protection from the elements in addition to their fire resistant characteristics. Additional steps to insulate the wall are eliminated.

ThermalSafe panels may be installed without sealant in the side joint for partition wall applications when a vapor seal is not required, greatly enhancing installation speed.

For interior applications, partitions can be disassembled, moved and reinstalled rather than having to be demolished, the waste materials disposed of and the partition walls completely rebuilt.

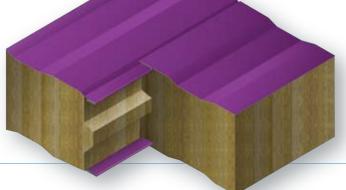
Mineral wool panels have good sound transmission acoustical properties compared to many other insulated metal panel products.

The ThermalSafe core is dimensionally stable, water repellent and will not expand. Mineral wool, however, is a fibrous material with a high perm rating, so the ThermalSafe panel edges must be protected from moisture.





FALLSVIEW INDOOR WATER PARK EXTERIOR AND INTERIOR



THERMALSAFE® SIDE JOINT CONNECTION

FIRE RESISTANCE DATA

• UL fire resistance ratings of the finished panel for nonbearing walls are: one hour in a 4" thickness, two hour in a 7" thickness and three hour in an 8" thickness.

• For more complete fire resistance rating data, including fire resistance ratings for pipe penetrations both metallic and non-metallic, ducts, and fire door assembly design installed in a fire resistive ThermalSafe[®] wall, go to metlspan.com and follow links to fire resistance approvals data.

• Wall framing support members and adjacent construction may require fire protection as specified by applicable building code. The customer is responsible for specifying the appropriate fire protection in these areas.

HANDLING

Because of ThermalSafe's heavy weight to strength ratio, use of specialized vacuum actuated lifting equipment is suggested to ensure safe and controlled handling of the panels.

Traditional end-lifting methods may be used subject to proper handling of the panels. Refer to the ThermalSafe Installation Guide for complete handling suggestions.



PANEL SPECIFICATIONS

FACE PROFILE: Light Mesa profile, nominal ¹/₃₂" deep

MODULE WIDTH: 42"

THICKNESS: Nominal 4", 5", 6", 7", 8"

LENGTHS: Minimum is 8'-0". Maximum available length is variable by thickness, weight, end use and orientation. Contact Metl-Span for custom length availability.

EXTERIOR FACE: Stucco embossed, G-90 galvanized and/or AZ-50 aluminum-zinc coated steel in 26 Ga. and 24 Ga.

INTERIOR FACE: Stucco embossed, G-90 galvanized and/or AZ-50 aluminum-zinc coated steel in 26 Ga. and 24 Ga.

CORE: Non-combustible structural mineral wool

PANEL JOINT: Exclusive LockGuard[®] side joint has a flush, double tongue and groove connection of the metal faces with an advanced integral spline to join the mineral wool core.

R-VALUE: The core insulating value is 3.61 "R" per inch.



PIONEERING INSULATED METAL PANEL TECHNOLOGY

1720 Lakepointe Drive Suite #101 Lewisville, Texas 75057 **Toll-free: 877.585.9969** Tel: 972.221.6656 Fax: 972.420.9382 Email: panel@metlspan.com Web: metlspan.com

COATINGS & SURFACINGS

To ensure a lasting quality appearance, the exterior face sheet of Metl-Span CF, CFI, CFR, and ThermalSafe[®] is treated with a base primer, followed by a premium coating of full-strength 70% PVF2 fluoropolymer finish. A siliconized polyester finish is available in a reduced palette of standard colors for projects where economy is the primary consideration. All colors are available in full-strength 70% PVF2 fluoropolymer finish. The standard siliconized polyester colors in 26 Ga., G-90 galvanized and/or AZ-50 aluminum-zinc coated steel are Polar White, Sandstone and Regal Gray. A full range of exterior Colors & Coatings are available for the Architectural market. For specific information about our available colors and coatings, visit us online for a comprehensive selection.

AVAILABILITY & COST

Metl-Span panels are manufactured in Lewisville, Texas; Prince George, Virginia; North Las Vegas, Nevada; and Shelbyville, Indiana. They are available through a network of independent representatives, independent contractors and design-build companies. Since cost is a factor that depends on each installation based on panel profile, insulation thickness, coatings and quantity, contact Metl-Span for the name of the nearest representative for pricing. For more complete information on panel specifications, technical data, a detail library and the location of the nearest sales representative, please visit the Metl-Span Web site at metlspan.com

WARRANTY

Metl-Span CF, CFI, CFR, and ThermalSafe panels are warranted to be free from defects in material and workmanship for a period of two (2) years from the date of shipment. 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.

Metl-Span is not responsible for selection and application of colors, coatings and products, and reserves the right to substitute, delete and change gauges, widths, thicknesses, finishes, profiles and colors on its products at its discretion, at any time and without notice.



©2009 Metl-Span LLC - A BlueScope Steel Company. All rights reserved. Printed in the U.S.A. METL-09-009