## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDUSTRY LEADER</td>
<td>2</td>
</tr>
<tr>
<td>WHY INSULATED METAL PANELS</td>
<td>3</td>
</tr>
<tr>
<td>WHAT WE’VE DONE</td>
<td>6</td>
</tr>
<tr>
<td>OUR PRODUCTS</td>
<td>8-15</td>
</tr>
<tr>
<td>TESTING &amp; CERTIFICATIONS</td>
<td>16</td>
</tr>
<tr>
<td>DESIGN OPTIONS</td>
<td>17</td>
</tr>
</tbody>
</table>

**Cover Project:** Fresh Direct  
**Panel Type:** Light Mesa, Mesa  
**Location:** Bronx, New York
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.

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.

PROJECT: SIRNA & SONS PRODUCE
PANEL TYPE: FLUTE, LIGHT MESA, MESA
LOCATION: RAVENNA, OHIO
WHY INSULATED METAL PANELS (IMPs)

FEATURES & BENEFITS

ALL-IN-ONE BARRIER
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 specifically 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
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/SUSTAINABLE
Metl-Span panels are sustainably constructed, qualifying many buildings for credits in the Leadership in Energy and Environmental Design (LEED®) Rating System.

FIRE-RESISTANT SOLUTIONS
Composite IMPs are available, using non-structural mineral wool insulation fabricated and tested to achieve the needed fire ratings.

DESIGN FLEXIBILITY
Metl-Span 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.

* ThermalSafe panels contain a fire-resistive mineral wool core.
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

- Double joint system provides redundancy against leakage.
- Rigid, continuous insulation, no loss of R-value due to compression.
- Meets or exceeds energy code requirements in ALL climate zones.
- FM 4880 Class 1 approved. Suitable for use in combustible and non-combustible construction per IBC chapter 26.

INSULATED METAL PANEL ROOF

- IMPs are rigid, no loss of R-value due to compression.
- Weather tight seams ensure proper performance against leakage.
- Panels are factory notched and swaged for ease of installation.
- Panels contain all necessary control layers (air, water, vapor and thermal).
WHAT WE’VE DONE
A LOOK AT OUR WORK

PROJECT: ATLANTIC HEALTHY FOODS
PANEL TYPE: FLUTE, MESA, THERMALSAFE
LOCATION: ATLANTA, GEORGIA

PROJECT: STERLING MERCHANDISING
PANEL TYPE: CFR ROOF, MESA
LOCATION: BAYAMON, PUERTO RICO
OUR PRODUCTS

PRODUCT SPECIFICATIONS

Metl-Span panels serve as walls, partitions, 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.

With Metl-Span IMPs you have more profile selections including finished and custom lengths, face options, stainless steel or FRP substrates and a variety of USDA compliant coating options to match your project needs.
The Metl-Span CF Mesa insulated metal panel is well suited for exterior and interior walls and ceiling applications. The longitudinal planks profile on both faces creates symmetry on the outside of the building and room to room within. The minor rib provides a flattened appearance. Mesa panels are ideal for exterior, interior, partition and ceiling applications.

**PANEL SPECIFICATIONS**

- **Width:** 30", 36", 42"
- **Thickness:** 2", 2½", 3", 4", 5", 6", 8"
- **Length:** NON-DIRECTIONAL EMBOSSED  
  8'-0" to 32'-0" Horizontal  
  8'-0" to 52'-0" Vertical  
- **Exterior Profile:** 1" wide, nominal ⅛" deep, longitudinal reveals at 8.4" on center, embossed  
- **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 ⅛" deep, embossed or unembossed  
- **Interior Face:** G-90 galvanized or AZ-50 aluminum-zinc coated steel or 304 or 316 stainless steel in 26, 24 and 22^ Ga.  
- **Joint:** Offset double tongue-and-groove with extended metal shelf for positive face fastening

The ribbed profile of the Metl-Span CF Flute insulated metal panel provides bold vertical reveals complementary to almost any commercial or industrial building. The Flute wall panel is also a suitable profile for the exterior of cold storage buildings.

**PANEL SPECIFICATIONS**

- **Width:** 42"  
- **Thickness:** 2", 2½", 2¾", 3", 4", 5", 6", 8"  
- **Length:** NON-DIRECTIONAL EMBOSSED  
  8'-0" to 32'-0" Horizontal  
  8'-0" to 52'-0" Vertical  
- **Exterior Profile:** 1" wide, nominal ⅛" deep, longitudinal reveals at 8.4" on center, embossed  
- **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 ⅛" deep, embossed or unembossed  
- **Interior Face:** G-90 galvanized or AZ-50 aluminum-zinc coated steel or 304 or 316 stainless steel in 26, 24 and 22^ Ga.  
- **Joint:** Offset double tongue-and-groove with extended metal shelf for positive face fastening

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*Available only from Nevada plant | **K-Factor calculations: Btu in/ft²hr. °F | 22^ Ga. not available for stainless steel
CF LIGHT MESA

The Metl-Span CF Light Mesa insulated metal panel is well suited for exterior and interior walls and ceiling applications. The shallower version of the Mesa profile creates symmetry on the outside of the building and room to room within. The minor rib provides a flattened appearance. Light Mesa panels are ideal for interior, partition and ceiling applications.

PANEL SPECIFICATIONS

- **Width:** 30", 36", 42"
- **Thickness:** 2", 2½", 3", 4", 5", 6", 8"
- **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 16'-0" Vertical
- **Exterior Profile:** Lightly profiled 1/16" deep, longitudinal planks 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 1/8" deep, embossed or unembossed
- **Interior Face:** G-90 galvanized or AZ-50 aluminum-zinc coated steel or 304 or 316 stainless steel in 26, 24 and 22 Ga.
- **Joint:** Offset double tongue-and-groove with extended metal shelf for positive face fastening

CFR

Developed as the preeminent innovation in all-in-one composite panel design, this standing seam roof panel combines durable interior and exterior faces with our unmatched polyurethane core. The CFR roof panel provides an unsurpassed weathertight seal and service life. Ideal for commercial, industrial and institutional markets, the panel can be used on roof slopes as low as 1/6": 12".

PANEL SPECIFICATIONS

- **Width:** 30", 36", 42"
- **Thickness:** 2", 2½", 3", 4", 5", 6"
- **Length:**
  - Non-directional embossed: 9'-6" to 53'-0", contact Metl-Span for custom availability.
  - Unembossed: 9'-6" to 53'-0" Horizontal
- **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 1/8" deep, embossed or unembossed
- **Interior Face:** G-90 galvanized or AZ-50 aluminum-zinc coated or stainless 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.

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"Available only from Texas plant | 'Interior panels only | 22" Ga. not available for stainless steel
FIRE RESISTANCE

THERMASAFE® & THERMASAFE 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. Achieves a one-, two- or three-hour fire resistance rating for walls and 1.5 hours for ceilings.

PANEL SPECIFICATIONS

Width: 42”

Thickness: Nominal 3”, 4”, 5”, 6”, 7”, 8”

Length: NON-DIRECTIONAL EMBOSSED

8'-0” to 40'-0” variable by thickness; contact Metl-Span for exact maximum length for each thickness

Exterior Profile: Ultra-Light Mesa, Santa Fe or Striated, nominal ½” deep, embossed

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

Interior Profile: Ultra-Light Mesa, nominal ½” deep, embossed

Interior Face: G-90 galvanized or AZ-50 aluminum-zinc coated steel or 304 or 316 stainless steel in 26, 24 and 22” Ga.

Weight, 26 Ga. Face:

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<tr>
<th>Thickness</th>
<th>3”</th>
<th>4”</th>
<th>5”</th>
<th>6”</th>
<th>7”</th>
<th>8”</th>
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<td>PSF</td>
<td>3.94</td>
<td>4.65</td>
<td>5.49</td>
<td>6.21</td>
<td>6.92</td>
<td>7.63</td>
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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

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/ft²hr. °F  |  ‘Ultra-Light Mesa and Striated only  |  22” Ga. not available for stainless steel
PROJECT: SIRNA & SONS PRODUCE
PANEL TYPE: FLUTE, LIGHT MESA, MESA
LOCATION: RAVENNA, OHIO
INTERIOR PARTITION

CF PARTITION

The CF Partition insulated metal panel is designed to be the most economical choice for interior partition applications. The lightly corrugated profile provides added strength on both faces and ensures symmetry from the exterior to the interior of the building, and between rooms.

PANEL SPECIFICATIONS

Width: 44.4”
Thickness: 2”, 2½”, 2¾”, 3”, 4”, 5”, 6”
Length:
- Non-DIRECTIONAL EMBOSSED
  - 8’-0” to 52’-0” Vertical
- UnEMBOSSED
  - 8’-0” to 40’-0” Vertical

Exterior Profile: Mesa, nominal ⅛” deep, embossed or Light Mesa, nominal ⅛” deep, embossed or unembossed

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

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

Interior Face: G-90 galvanized or AZ-50 aluminum-zinc coated steel or 304 or 316 stainless steel in 26, 24 and 22 Ga.

Joint: Offset double tongue-and-groove

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

Fastening: Through fastened at the top and bottom of the panel

Thermal Values: K-factor, Btu in/ft² hr. °F
@ 75° F (24° C) mean core temperature = 0.140. K-factor, Btu in/ft² hr. °F @ 40° F (4° C) mean core temperature = 0.126.

FRP CLEANSEAM™

The Metl-Span FRP CleanSeam insulated metal panel enables wall panels to join almost seamlessly, preventing any bacterial growth. The fiberglass-reinforced plastic provides the panel with durable, flush-surface hard seam and solid panel structure. FRP CleanSeam panels are ideal for food processing, commissaries and clean rooms.

PANEL SPECIFICATIONS

Width: 42”, 44.4”
Thickness: 2”, 3”, 4”, 5”, 6”
Length: 8’-0” to 20’-0”

FRP Face Profile: No profile, 0.075” thick, Class A, unembossed FRP, USDA Compliant

Non FRP Face Profile: Mesa, nominal ⅛” deep, embossed or Light Mesa, nominal ⅛” deep, embossed

Substrate: G-90 galvanized or AZ-50 aluminum-zinc coated steel or 304 or 316 stainless steel in 26, 24 and 22 Ga.

Finish Option: Non-FRP faces available with USDA Compliant polyester coating, igloo white color.

CleanSeam Sealant: Two-part compound which seals the panel surfaces for a smooth, durable finish—virtually impervious seal to prevent water penetration

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

*Available only from Nevada plant | 22^ Ga. not available for stainless steel | ‘Interior panels only
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 (THERMA SAFE 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 the Cornerstone Building Brands 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.

See metlspan.com for published EPD and LCA.
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.

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.

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.

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. For more information, see color chart or visit metlspan.com.