

The CMR-24[®] Roof System

Explore the Butler Difference

BUTLER[®]

The image shows the interior of a large car dealership. The ceiling is a prominent feature, featuring a white, grid-like CMR-24 roof system with large, white, cylindrical ducts running across it. Several white, dome-shaped pendant lights are suspended from the ceiling. The floor is filled with various cars, including a silver sedan and a red SUV. In the background, there are large windows and several clusters of balloons in red, white, and blue colors, some with white stars. An American flag is also visible near the windows. The overall atmosphere is bright and clean.



The CMR-24[®] Roof System

Performance, Protection, and Peace of Mind— All Rolled Into One.

Precision Engineering

Assures the Highest Quality Installation.

The CMR-24[®] roof system features factory-punched structural members and roof panels to assure a precisely aligned roof system. Precise alignment adds durability to the roof system and enables it to respond easily to daily and seasonal temperature changes.

The Pittsburgh Double-lock Seam

Creates a True Monolithic Weathertight Surface.

The CMR-24 roof system uses the Pittsburgh double-lock seam with the final 180 degrees completed in the field with a portable seaming machine. Other manufacturers snap or crimp panels with a machine, producing a loose, vulnerable, less weathertight seam.

Roof Clips Designed to Move

Allows for Expansion and Contraction.

The CMR-24 clip allows the roof to expand and contract with changing temperatures. This movement prevents stress at the clips, fasteners, and splices that could otherwise make the roof vulnerable to leaks and wind damage.

Energy Efficient

High R-Value Options Are Available.

Roof insulation options up to R-27 are available with the CMR-24 roof system. The superior-quality rigid board insulation, with embossed aluminum facing on both sides, is available in a variety of thicknesses and insulation values.

Sustainable "Green" Design

Contributes to Environmental Responsibility.

The steel in the CMR-24[®] roof system is a material-efficient, recyclable, low-maintenance, sustainable, and long-life roof solution. Green attributes of the CMR-24 roof system may also earn credits for LEED[®] certification. It's also available in a variety of highly solar-reflective "cool roof" color finishes.

Staggered Panel Splices

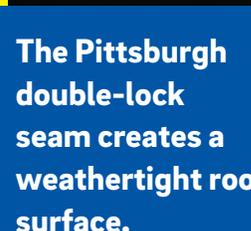
Add Further Leak Protection.

Locating panel endlap splices of adjacent panels in the same position across the roof creates a difficult detail to seal where the corners of four metal panels meet. The CMR-24 roof system offsets adjacent panel splices to create a superior lap detail and virtually eliminate leaks. Splices are also located over supporting steel for added strength.

Wind Uplift Resistance

Adds Protection and Peace of Mind.

The CMR-24 roof system carries the highest UL wind uplift rating (Class 90). It has also been tested and approved by FM Global as a Class 1 Panel roof. In addition, the CMR-24 roof system is approved for use in hurricane zones such as Miami-Dade County, Florida.



The Pittsburgh double-lock seam creates a weathertight roof surface.

Weathertight roof curbs are achieved with the use of interior fasteners.

Staggered panel splices virtually eliminate vulnerable areas on the roof.

Integrated Gable Trim

Designed for Thermal Expansion and Contraction.

Like virtually every other aspect of the CMR-24 roof system, the gable trim is also designed to expand and contract with daily and seasonal temperature changes. It becomes an integral part of the roof system and improves performance and durability.

Weathertight Roof Curbs

Eliminate Potential Problem Areas.

Butler's all-aluminum IF curb system fasteners are positioned on the interior flange of the roof curbs to eliminate another potential area for water to infiltrate.

Flexible Ridge Design

Performance in Every Detail.

The CMR-24[®] roof system ridge also moves to accommodate expansion and contraction. Our proven ridge design "caps off" the CMR-24 roof system—the best-performing roof system available.

Additional Features of the CMR-24[®] Roof System.

VAPOR RETARDER

Protects Insulation Performance.

A vapor retarder helps control condensation within the CMR-24 roof system and helps keep the insulation material joints dry.

RIGID INSULATION BOARD*

Delivers High R-values.

A superior Thermax[™] metal building board, with embossed aluminum facing on both sides, enables the CMR-24 roof system to deliver exceptional R-values. It has been tested and listed for fire resistance by UL.

BEARING PLATE

Reinforces Roof System Strength.

The CMR-24 roof system bearing plate insures that the insulation is not damaged during the panel clip installation.

WARRANTY PROTECTION

Adds Greater Peace of Mind.

The CMR-24 roof system is available with a 25-year warranty for panel finish protection and weathertightness. With reasonable care and maintenance, it is your worry-free roof solution for 25 years and beyond.

METAL LINER

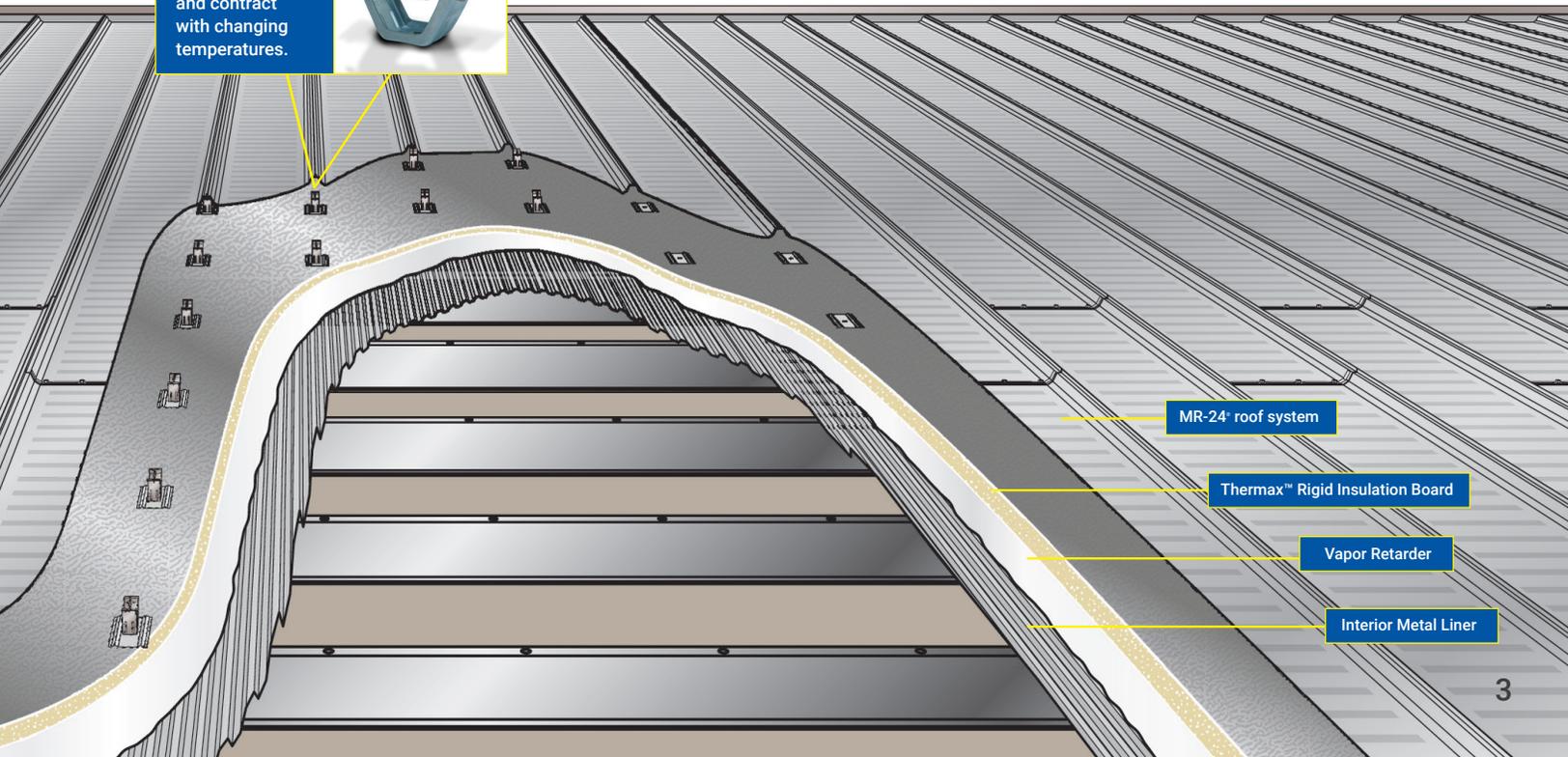
Adds Strength and Beauty.

The CMR-24 roof system features a steel liner panel that is corrugated for added strength and acts as a diaphragm to transfer wind loads through the roof system. It also creates a uniform, abuse-resistant, attractive appearance on the inside of the building. The liner is available in unpainted Galvalume[®] or painted white and can be easily cleaned.

This clip allows the CMR-24[®] roof system to expand and contract with changing temperatures.



*The acoustic characteristics of rigid foam board insulation may not be suitable for certain buildings. See your Butler Builder[®] for more information.



Experience the Butler Difference.

The CMR-24® roof system is a key component of the Butler Difference—a competitive advantage that has enabled Butler to remain the leader in the building systems industry for more than 100 years. You'll also find the Butler Difference in these details:

Butler Builders—offering single-source responsibility and complete construction services. Find your local Butler Builder® at www.butlermfg.com.

High-performance products—such as acrylic-coated galvanized C/Z purlins and girts, unique MR-24® seam that virtually eliminates roof leaks, and structural and wall systems that integrate easily with conventional building materials.

Butler-Cote™ finish—only Butler offers this superior full-strength Kynar 500® or Hylar® 5000 fluoropolymer finish system as the standard exterior finish on all painted panels and trim.

Weathertightness warranties—available 25-year warranties for panel finish protection and weathertightness are a testament to the performance that a Butler® building system offers.

Performance Plus Efficiency

The CMR-24® roof system offers all the strength, longevity, and weathertightness of the MR-24® roof system with the additional benefits of a rigid insulation board for superior energy efficiency and an attractive abuse-resistant interior steel liner.

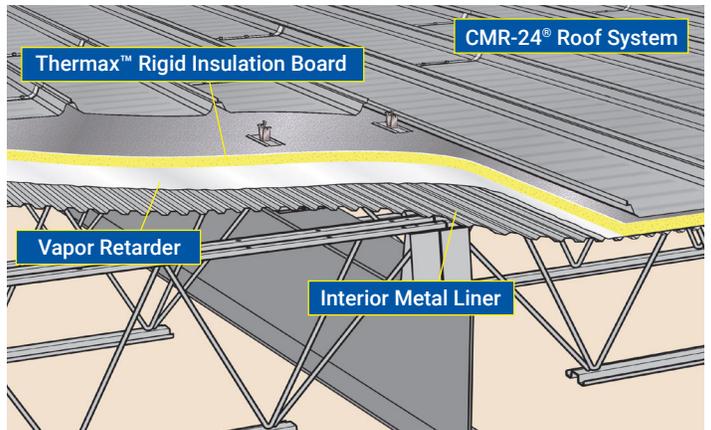
Attributes of the MR-24® Roof System

- Introduced in 1969
- Industry's most specified standing-seam roof system—more than 2 billion square feet installed
- At least twice the expected lifespan of most conventional roof systems
- Fully integrated roof penetrations and trims
- Meets rigorous testing standards of FM, UL and ASTM, which may reduce insurance costs
- Available 25-year warranties for panel finish protection and weathertightness

The CMR-24 Roof System

Includes all the features of the MR-24 roof system plus—

- Superior-quality rigid board insulation in a variety of thicknesses and R-values
- Attractive ribbed interior steel liner
- Vapor retarder to help control condensation



CMR-24 Roof System Applications

- Retail
- Warehouses
- Manufacturing plants
- Gymnasiums
- Airplane hangars
- Other larger structures

Butler® building products are constantly being improved; therefore, the information contained herein is subject to change without notice. Before finalizing project details, contact your nearest Butler Builder® or Butler Manufacturing™ for the latest information. Kynar 500® is a registered trademark of Arkema. Hylar 5000® is a registered trademark of Solvay Solexis. The USGBC logo is a registered trademark owned by the U.S. Green Building Council and is used by permission.

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