

# The MR-24<sup>®</sup> Roof System

Explore the Butler Difference

**BUTLER**<sup>®</sup>





# The MR-24<sup>®</sup> Roof System

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

### Precision Engineering

*Assures the Highest Quality Installation.*

The MR-24<sup>®</sup> 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.*

Only the MR-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 seam.

### Energy Efficient

*High R-Value Options Are Available.*

Roof insulation options up to R-40 are available with the MR-24 roof system. The system's panels move independently of the supporting structure, assuring no compromise or deterioration due to thermal cycling—a condition that often occurs within layers of conventional roofing materials.

### Sustainable "Green" Design

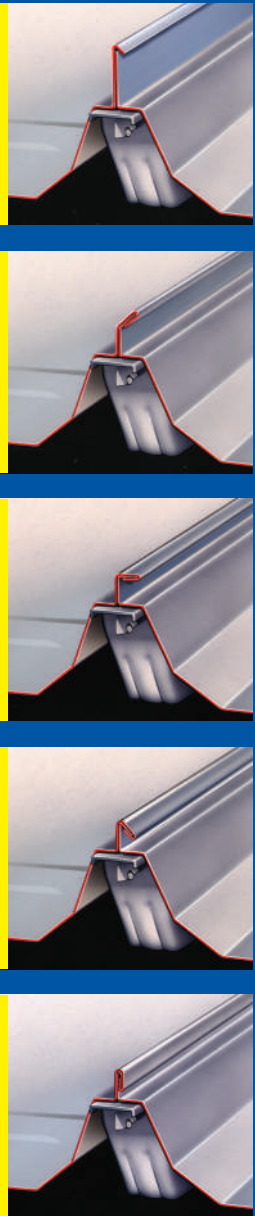
*Contributes to Environmental Responsibility.*

The MR-24 roof system is a material-efficient, recyclable, low-maintenance, and long-life roof solution with recorded life cycles of 45 years. "Green" attributes of the MR-24 roof system may also earn credits for LEED<sup>®</sup> certification. It's also available with a highly reflective solar color finish.

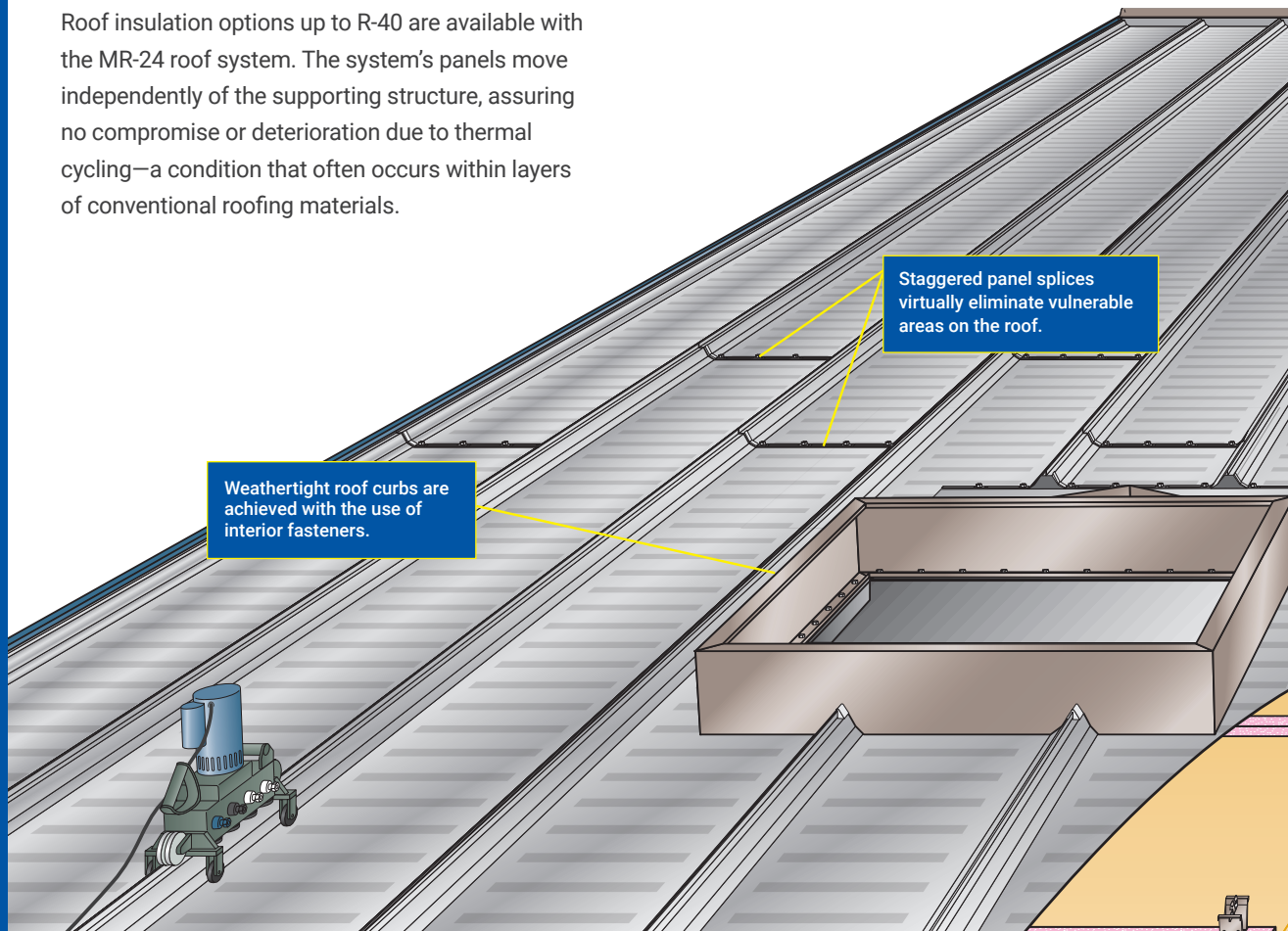
### Staggered Panel Splices

*Add Further Leak Protection.*

Locating panel 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 MR-24 roof system eliminates this by offsetting adjacent panel splices—interlocking adjacent panels virtually eliminates leaks and creates a superior lap detail.



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.

## Wind Uplift Resistance

*Adds Protection and Peace of Mind.*

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

## Weathertight Roof Curbs

*Eliminate Potential Problem Areas.*

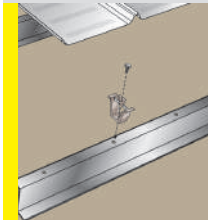
Butler's all-aluminum IF curb system fasteners are positioned on the interior flange of the roof curbs to eliminate another potential area for water to infiltrate.

## The Difference is in the Details of the MR-24® Roof System.

### FACTORY PUNCHING

*Assures Fast and Precise Installation.*

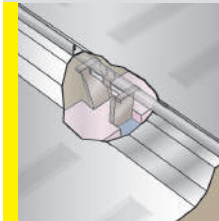
All roof panels and structural members of the MR-24® roof system are factory punched for proper panel alignment, smooth expansion/contraction and weathertightness, as well as the accurate installation of closures, roof accessories, and trim.



### ROOF CLIPS DESIGNED TO MOVE

*Allows for Expansion and Contraction.*

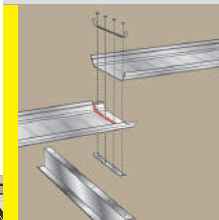
The CMR-24 clip allows the roof to expand and contract with changing temperatures. This movement prevents stress at the clips, fasteners, and splices that could otherwise make the roof vulnerable to leaks and wind damage.



### INTEGRATED GABLE TRIM

*Designed for Thermal Expansion and Contraction.*

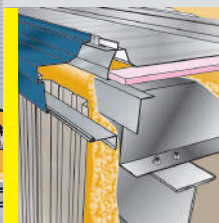
Like virtually every other aspect of the CMR-24 roof system, the gable trim is also designed to expand and contract with daily and seasonal temperature changes. It becomes an integral part of the roof system and improves performance and durability.



### SUPPORTED PANEL END SPLICES

*Reinforce Vulnerable Areas.*

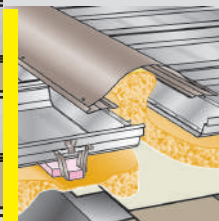
SplICES are created when two roof panels must be joined together. Most manufacturers allow midair splICES, resulting in stress under roof traffic or heavy snow. Butler eliminates this problem by locating splICES directly over supporting steel.



### 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.



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



# Experience the Butler Difference.

The MR-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](http://www.butlermfg.com).

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

**Butler-Cote™ finish**—Butler offers this superior full-strength Kynar 500®/Hylar 5000® fluoropolymer finish system as the standard exterior finish on all painted panels and trim. The Butler-Cote finish is warranted for 25 years—with no prorating.

**25-Year Warranty**—it stands to reason that the industry's best roof also offers the industry's best warranty. The MR-24 roof system is available with a 25-year weathertightness warranty. Ask your Butler Builder® for details.

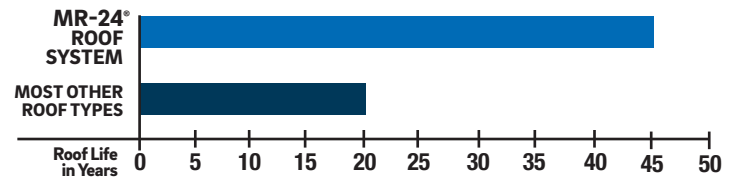


## The MR-24® Roof System

- Introduced in 1969
- More than 2 billion square feet installed worldwide
- Twice the expected lifespan of most conventional roof systems
- Industry's most specified standing-seam roof system
- Fully integrated roof penetrations and trims

## Maximum Service Life

The MR-24® roof system has 45 years of documented in-place performance, and it lasts, on average, more than twice as long as conventional roofs.



(Most Other Roof Types includes: Most single-ply, EPDM, and built-up roof systems)

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