



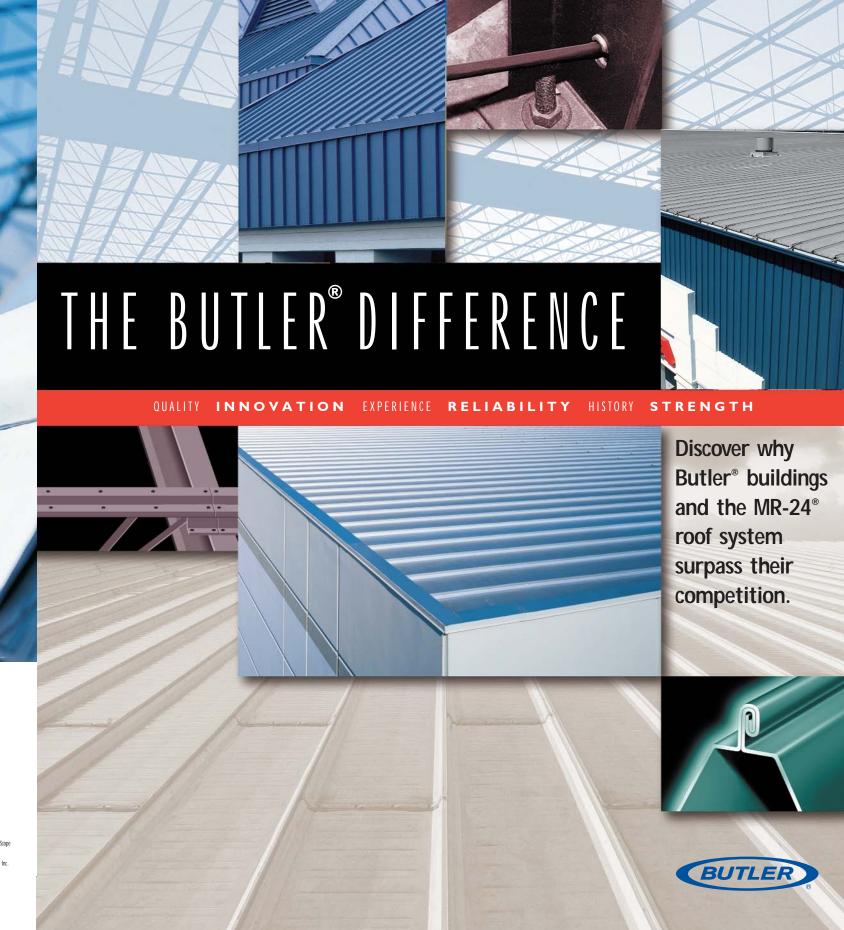




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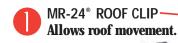
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# ACUTE ATTENTION TO DETAIL

For 100 years, Butler Manufacturing™ has maintained a reputation for quality in the building industry. Using only the best materials and innovative procedures, we are able to provide our customers with buildings that will look as great as they perform for years and years to come.

In pushing ourselves toward a standard of excellence, we've developed product advantages known collectively as "The Butler Difference." The MR-24® roof system is part of this difference and is just one of the reasons why the Butler name is respected around the world. Since its introduction in 1969, the MR-24 roof system has accumulated an outstanding record of reliability. This record has been validated time and again by successful tests conducted in accordance with the most demanding, recognized specifications in the industry.



The roof clip is the "invisible component" that holds the standingseam roof panels to the supporting structural members. Because metal roofs expand and contract with daily and seasonal temperature changes, the clip was carefully designed to provide a positive attachment and allow the roof to move freely in both directions. Without this mobility, the roof panels would tug and pull on the clip, a process that will eventually cut into the roof panels, pull out the fasteners or damage the clip, causing the building to be vulnerable to leaks and wind damage.



#### **MEATHERTIGHT SEAMS** Protect against leaks.

The MR-24 roof system is the only standing-seam roof system where the critical 180 degrees of the roof panel seam is mechanically field-rolled to complete a 360-degree Pittsburgh double-lock seam—creating the tightest seam available today. Panels of other roof systems may simply snap together or be crimped, leaving them too weak to withstand foot traffic, wind or snow and ice build-ups. Inside the seam, a factory- 3applied sealant assures weathertightness in even the most unforgiving conditions.



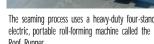


his clip allows the MR-24 roof









With over two billion square feet in place and 40+ years of in-place performance, the MR-24° roof system is the most time-tested and widely used standing-seam roof system available.

## ENGINEERED TO LAST

#### FACTORY PUNCHING Creates perfect alignment.

Proper alignment of roof panels is crucial to roof performance. Poor alignment affects weathertightness and creates problems when installing closures, roof accessories and trim. All roof panels and structural members of the MR-24 roof system are factory-punched to assure proper alignment.

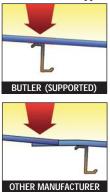


Above Top: Butler's factory punching assures straight panel alignment.

**Above Bottom:** Without factory punching, these misaligned panels bind on clips, strain seams and compromise weathertightness.

### SPLICE SUPPORT Secures solid structures.

On wider buildings, roof panels are placed end to end, creating a splice. Most manufacturers allow their splices to occur in midair—without direct structural support. Installers and other



on the splice, providing the opportunity for the splice to open. Butler prevents this by designing splice locations to occur directly over supporting steel.

roof traffic, even the

weight of snow, will

push down on midair

splices and cause strain

#### STRONGER FASTENERS Maintain incredible strength.

Because other manufacturers don't factory punch their structurals, they are generally forced to use self-drilling screws to make critical clip



and panel attachments. In addition to providing a weak structure, self-drilling leaves behind metal shavings, which ultimately create rust problems. Butler factory punches structurals, and we use the Butler Scrubolt<sup>™</sup> fastener for clip and panel attachment. The high-strength, substantial Scrubolt fastener has twice the pullout strength of industry-standard self-drillers. It takes two to three times the number of self-drilling screws to equal the performance of one Scrublot.

#### STAGGERED PANEL SPLICES Prevent exposed seams.

Most manufacturers locate panel splices at exactly the same position across the entire roof. This creates a condition where four panel corners must be joined at the same location,

making it almost



keep weathertight. Butler staggers the panel splices to avoid assure weathertightness and to provide a stronger and superior roof system.

Above Top: Butler staggers panel splices to avoid the four-corner condition—another design feature to assure weathertightness and longer roof life.

Above Bottom: Most manufacturers locate panel splices at exactly the same position across the roof. This four-corner condition is very difficult to seal and keep weathertight.

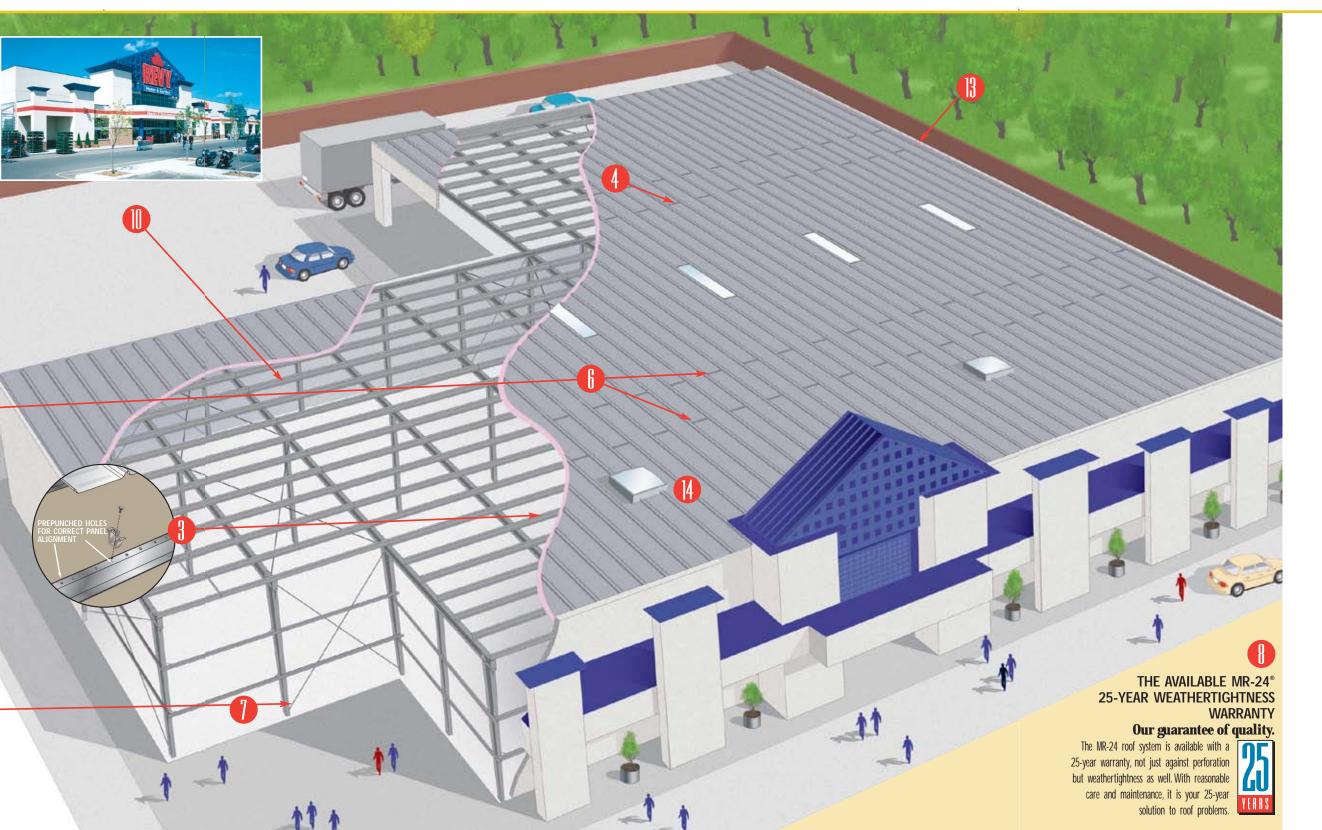
#### STEEL-ROD BRACING Provides solid reinforcement.

No matter how strong the building, the bracing system is its backbone. Over the years, Butler's steel-rod bracing retains its original strength and tightness. Rod bracing does not stretch or sag like wire rope and cable, which over time compromises the structural and roof integrity of your OTHER MANUFACTURER









#### KYNAR 500° AND HYLAR 5000° FINISHES **Enhance and protect.**

Butler uses the Butler-Cote<sup>™</sup> finish system made with Fluropon® resin on all exterior-painted products. Available in a variety of contemporary and solar colors, this paint system has set performance requirements for coatings and is the standard exterior finish on all Butler-painted roof panels, wall panels and trim. Its 25-year warranty protects against blistering, peeling, cracking or chipping of the paint finish.

### ACRYLIC-COATED STRUCTURALS Superior finish.

Butler uses only acrylic-coated galvanzied C/Z structural members. This finish is superior to primer paint and provides for a brighter interior finish than red oxide primer finishes.

### RESEARCH A fully tested system.

Our Butler Research Center performs qualitycontrol tests of roof materials and components,



gating new materials, parts and processes. The use of sophisticated testing equipment enables the staff to predict actual field performance of your building

system. Our roof products are rigorously tested and evaluated on an ongoing basis in compliance with our Zero Defect and specific FM Global requirements.

Actual 8' x 10' roof and wall assemblies are tested in the Butler® Guarded Hot Box to provide accurate insulating information, rather than theoretical data provided by most building product manufacturers. That means Butler® building systems deliver the energy efficiency they promise.



#### MR-24® ENGINEERED ACCESSORIES

RIDGE

Improved weatherightness

Butler's unique ridge design has concealed fasteners to improve weathertightness and the potential for roof leaks. In addition, Butler uses only about 2% of the exposed fasteners used by other manufacturers in a typ-

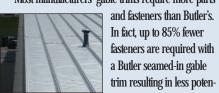


Butler's minimal use of exposed fasteners not only reduces the potential for leaks but also saves on installation costs.

Additionally our exclusive Lock-Rivet fasteners with factory-punched holes eliminates the need for drilling. This eliminates the metal OTHER MANUFACTURER shavings which cause rust-

ing as found in other manufacturers' ridge designs.

## GABLE TRIM Seamed-in with fewer fasteners. Most manufacturers' gable trims require more parts



In fact, up to 85% fewer fasteners are required with a Butler seamed-in gable trim resulting in less potential for leaks, roof problems and maintenance. The

Butler gable trim is also designed to expand and contract with seasonal temperature changes allowing OTHER MANUFACTURER the roof to move and

improve performance and durability.

## ROOF CURB OPENINGS Precision engineering.

Studies show that 90% of roof leaks are due to poorly designed or installed roof penetrations. Every Butler roof curb and opening





weld maintenance.