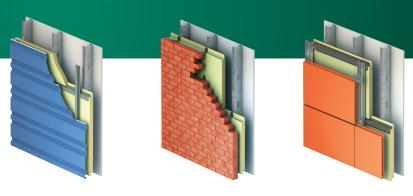


Simplicity. Performance. Versatility.



The Ultimate Barrier System

THE BACKBONE OF GREAT DESIGN. A SUSTAINABLE WALL SOLUTION. THE ULTIMATE BARRIER SYSTEM.

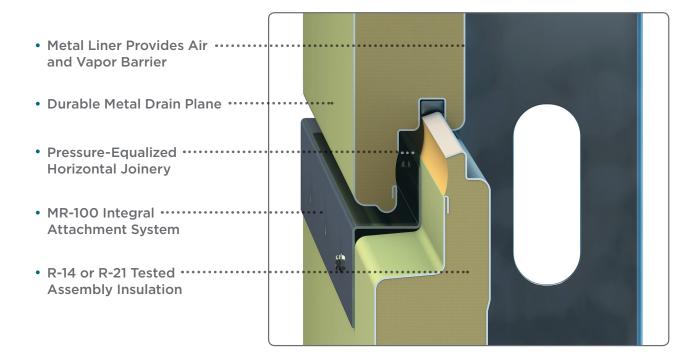


MetalWrap is more than an insulated composite backup panel — it's the ultimate backup wall system that provides superior thermal performance and minimizes moisture and air penetration for nearly any type of exterior rainscreen system, from single skin metal and MCM to brick, terra cotta and others.

MetalWrap Integrated Series Panels Up-close

MetalWrap achieves energy efficiency goals with its integrated composite panel design. This construction eliminates the need for conventional batt or board insulation, exterior gypsum, air barriers, vapor retarders and building wraps.

Chemeketa Community College, Salem, OR



MetalWrap Series incorporates a foamed-in-place insulating core material, which, combined with strong steel skins and integral joinery, provides a highly efficient backup wall system that is building code compliant.

MetalWrap Integrated





HORIZONTAL INSTALLATION				
Thickness	2", 3"			
Width	32" 36"			
Side Joint	Pressure Equalized			
Substrate	AZ 50 Galvalume			
Skin Thickness - Exterior/Interior (Standard)	29/29 ga.			
Skin Thickness - Exterior/Interior (Optional)	26, 24 or 22/26 ga. (G90 Galvanized Steel only)			
Span Capabilities	Up to 24" o.c.			
Exterior Face	Non-Embossed Flat			
Interior Liner	Non-Embossed Planked			
Finish	Epoxy Primer - Both Sides			
Support Requirement	Metal Studs			
Attachment Method	Panel Clips, pre-punched rails integrated with the panel joinery and integrated brick tie clips.			
Sealing Method	Joint has factory applied sealant. Panel ends and marriage beads to factory sealent applied during installation.			
Exterior Cladding Attachment Method	Subgirts attached to panel clips, integrated MR100 or MR300 rails. Integrated brick ties for brick installation			

MetalWrap Long Span

VERTICAL & HORIZONTAL* INSTALLATION

Thickness	2", 2.75", 4"			
Width	30" 36"			
Side Joint	Double Tongue and Groove			
Substrate	G90 Galvanized			
Skin Thickness - Exterior/Interior (Standard)	22/26 ga.			
Skin Thickness - Exterior/Interior (Optional)	20 ga. exterior 24 through 20 ga. interior			
Span Capabilities	Greater than 24" o.c.			
Exterior Face	Non-Embossed Flat			
Interior Liner	Non-Embossed Planked			
Finish	Epoxy Primer - Both Sides			
Support Requirement	Steel Girts			
Attachment Method	Panel Clips			
Sealing Method	Joint has factory applied sealant. Panel ends and marriage beads to factory sealent applied during installation.			
Exterior Cladding Attachment Method	Subgirts attached into panel joint (22 ga. face min.)			

^{*}For Horizontal Long Span applications, please consult CENTRIA Engineering for further details.

The Ultimate Barrier System

SUPERIOR TECHNOLOGY. SUPERIOR RESULTS.

The MetalWrap system is designed with CENTRIA's innovative Advanced Thermal and Moisture Protection (ATMP®) building envelope technology to control moisture and maximize thermal efficiency. In addition, MetalWrap Integrated Series can be installed horizontally and the Long Span series vertically — just one more reason why the MetalWrap system is the backup system of choice for architects and contractors across the country.



Boeing Everett Delivery Center, Everett, WA



Patent No.: US 7.748.181

SINGLE COMPONENT VS. MULTI-COMPONENT

With its single component construction MetalWrap is a vast improvement over traditional multicomponent building technology. A single component means a single source of responsibility, including less coordination, fewer scheduling and interface issues, and one-step installation by one contractor. Together, this adds up to a faster, more efficient construction process.

Benefits of MetalWrap Application:

- Provides an air barrier, vapor barrier and moisture control, drain plane and superior thermal performance in one composite assembly.
- Encloses the building faster in all weather conditions.
- Works well for all building types in all climates.
- Assembly thermal performance achieves U-factors that exceed IECC requirements in all climate zones.
- MetalWrap with different wall assemblies meets the requirements for the NFPA 285 multi-story fire test.
- Fully tested for air, water infiltration, vapor and thermal performance.

Traditional backup wall systems are installed in three or four steps, requiring multiple layers and multiple contractors.

- Multiple layers equals more potential for installation errors, including issues with the connections between the framing and exterior façade.
- Multiple layers can lead to moisture entrapment in the wall cavity, resulting in wet insulation, mold and mildew.

METALWRAP TYPICAL BACKUP SYSTEM 1 Exterior Rainscreen Exterior 2 Zee Support Rainscreen & Vertical Subgirts (May cause thermal 2 Subgirts short circuits) [3 3 MetalWrap **3** Insulation Series with integral 4 Air and Vapor attachment Barrier system 5 Exterior Sheathing 6 Cavity Insulation

The Ultimate Barrier System

INNOVATIVE INTEGRATION AND INSTALLATION

For a truly integrated project, you can choose from CENTRIA's extensive selection of metal wall panels, as well as windows, louvers and other top line accessories. CENTRIA's Rainscreen Systems whole wall solutions means performance assurance from a single source.



MR-100

MR-300

INTEGRAL ATTACHMENT SYSTEMS

Integral attachment systems offer enhanced flexibility, even faster installation and superior thermal performance throughout the joint. There are two attachment systems — the MR-100 and MR-300. Both systems integrate with the panel joinery, are continuous along the panel length. They come pre-punched from the factory, making installation faster, as well as facilitating the placement of vertical sub-framing.

System Selection Guide

Rainscreen	MR-100	MR-300	Brick Ties	Panel Clips
Horizontal Profile Panels	X*	X*		X*
Vertical Profile Panels	Х	Х		X*
Brick			Х	
Terra Cotta	X*	X*		
ACM Panels	X*	X *		X*
Honeycomb Panels	X*	X *		
Stucco	X*			'
Stone Panels	X*			
Fabric Panels		X*		
C/S Louvers		X		

^{*}Additional subgirts are required.

LONG SPAN SERIES

The MetalWrap Long Span Series provides flexible options when attaching direct to steel girts up to 6' o.c.

METALWRAP SERIES IS FULLY TESTED AND CODE COMPLIANT

Building and energy code compliance are critical parts of any construction project. MetalWrap provides a superior solution for these requirements and outperforms multi-component wall assemblies.

Multi-Component Wall R-21 Batt Insulation R-10 Continuous insulation outboard between 6-inch steel of gypsum studs at 16-inch centers; Effective R-7.4 - Gypsum board **Average Surface** 2-inch deep, 18GA Temperature = 15°F steel zee-shaped Colder away from sub-framing at framing; warmer near. 24-inch centers 0.5° 7.9° 16.4° 24.8° 33.3° 41.8° 50.2° 58.7° 67.1°

3" MetalWrap Series 3-inch MetalWrap No Insulation between Series Panel 6-inch Steel Studs at 16-inch centers; Effective R-0.91 Gypsum board **Coldest Surface** Rail through Temperature = 50°F fasteners at Framing impact 16-inch centers is minimal. 0.0° 8.4° 16.8° 25.2° 33.5° 41.9° 50.3° 58.7° 67.1° COLOR LEGEND (°F)

Exterior Temperature (0°F), Interior Temperature (70°F)

Thermographs

The images to the left compare thermally equivalent wall assemblies.

- The multi-component wall with continuous insulation still requires supplemental steel framing (Zs) to convey the wind load from the rainscreen to the supports.
- Required supplemental framing for the multi-component wall leads to a loss in thermal performance and leads to a greater potential for condensation in the cavity.
- MetalWrap Series exceeds IECC
 energy performance requirements
 based on U Factors tested in
 accordance with ASTM 1363.
 MetalWrap Series compliance
 is based on using the U-Factor
 Alternative Method as published in
 a table by climate zone in the IECC.
- MetalWrap has several wall assemblies that pass NFPA 285 and it meets the most rigorous standards in IBC Chapter 26.
- MetalWrap's single component design provides a simpler, faster and more thermally efficient solution.

The Ultimate Barrier System

METALWRAP SERIES TESTING DATA

Descrip	Description		Test Performance	
	Thermal Performance Thermal performance is a key component of MetalWrap's ATMP strategy. It utilizes strong, composite construction with thermally broken panel joinery and places the thermal envelope on the outside of the framing cavity.	ASTM C 1363	2" MetalWrap R-14, U=.074 2.75" MetalWrap V R-20, U=.049 3" MetalWrap R-21, U=.047 4" MetalWrap R-26, U=.039	
***	Water Performance Another component of our ATMP strategy, MetalWrap utilizes a pressure- equalized joinery system that eliminates moisture build up and entrapment within panel joinery, thus ensuring the highest level of water performance.	ASTM E 331	No water penetration at 15 psf	
	Air Infiltration With so much attention to thermal and water performance, air infiltration is often the most overlooked aspect of wall performance. MetalWrap addresses air infiltration by providing a continuous air barrier via a formed metal liner with a combination of field-applied and factory applied sealants.	ASTM E 283	Maximum 0.01 cfm/sq. ft. (0.05 l/s per sq. m) at a static-air-pressure difference of 1.57 lb./sq. ft. (75 Pa)	
000	Vapor Performance The liner-side seal method of the MetalWrap system limits vapor movement as well as diffusion.	ASTM E 96	.03 gr/h/ft2 inHg (Note 1 perm = 1gr) Categorized as Class 1 Vapor Retarder (<0.1 perms)	
DDD	Fire The MetalWrap insulated composite back-up panel system provides outstanding fire resistance. MetalWrap has been tested to the most	ASTM E 84 NFPA 285	Flame Spread < 25 Smoke Developed < 450 Passed	
	rigorous industry standards noted in IBC Chapter 26.	FM 4800	Passed (26/26 ga. only)	
П	Structural A foamed-in-place core and two steel skins offer strength, durability and an excellent drain plane. MetalWrap can be applied both horizontally and vertically to achieve required span capabilities.	ASTM E 72	Based on project requirements See load/span tables	

WEATHERTIGHT WARRANTY

CENTRIA backs its MetalWrap system with a weathertight 10-year warranty. When any cladding is used with MetalWrap, you get the extra quality and performance assurance that no other backup wall with multiple components and layers can offer.





Sherwood Middle School, Shrewsbury, MA





DON'T TAKE OUR WORD FOR IT

Here's what architects and contractors have to say about the benefits of working with MetalWrap Series.

"MetalWrap saves one-third of the cost and installs twice as fast as a typical backup wall system."

- Rodney Bassett, COBRA Construction

"The MetalWrap went up as a prefabricated panel, which limits your time onsite and on the lift. It makes a difference"

Barry Cooper, Senior Project Manager,
 Skanska

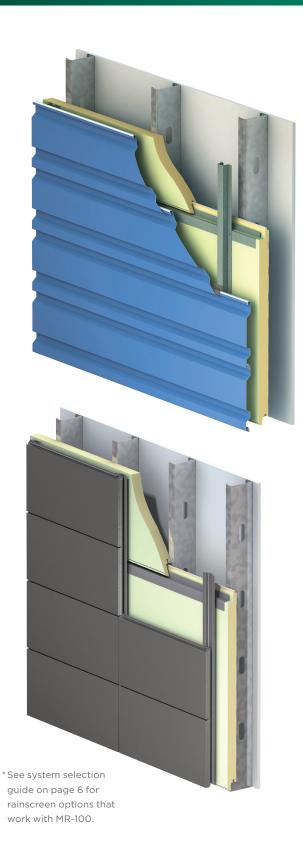
"MetalWrap is unique because it offers a single-component design, eliminating the need for multiple installation steps and saving us valuable time and money.

MetalWrap is one of the reasons why we're ahead of schedule and under budget."

Mike Pagano, AIA, Principal Architect,
 Lamoureux Pagano Associates

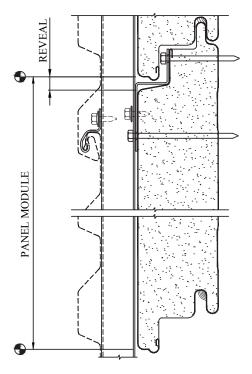
METALWRAP INTEGRATED SERIES

MR-100 System



MR-100

The MR-100 attachment system offers enhanced flexibility, even faster installation and superior thermal performance throughout the joinery. Both the MR-100 and MR-300 are continuous, play an integral role with the panel joint, come pre-punched from the factory, and facilitate the placement of vertical sub-framing*.



MR100 With Vertical Subgirts For Horizontal Cladding

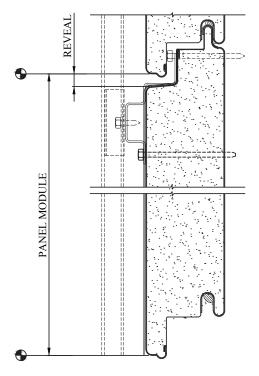
METALWRAP INTEGRATED SERIES

MR-300 System



MR-300

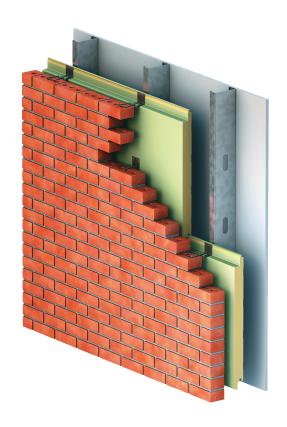
The MR-300 attachment system offers enhanced flexibility, even faster installation and superior thermal performance throughout the joinery. Both the MR-300 and MR-100 are continuous supports and play an integral role with the panel joint. The attachment supports come pre-punched from the factory and facilitate the placement of vertical sub-framing if required*.

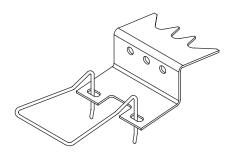


MR300 With Vertical Cladding

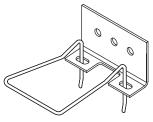
METALWRAP INTEGRATED SERIES

Horizontal MetalWrap for Masonry Applications

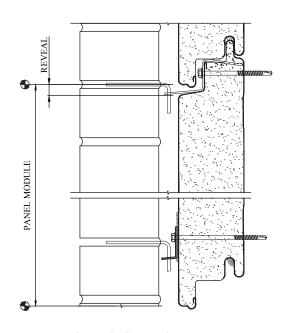




Integrated Panel Clip and Pintle For Brick



Mid-Span Face Attachment Clip and Pintle For Brick



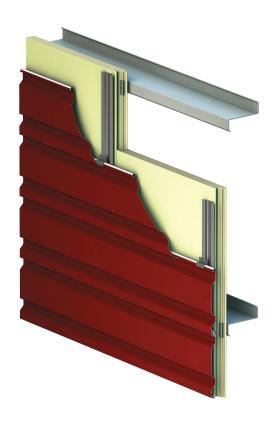
Integrated Panel Clips and Masonry Anchor With Brick





Cardiovascular Consultants Medical Office Building, Cape Girardeau, MI

METALWRAP LONG SPAN SERIES

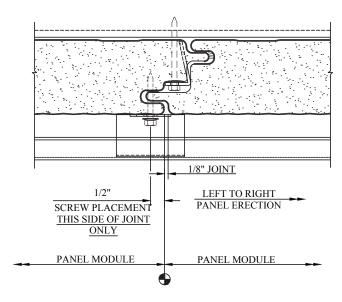


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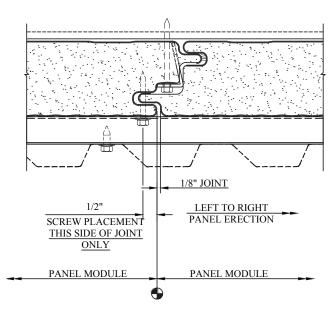
Long Span Horizontal with Vertical Subgirts for Horizontal Cladding

METALWRAP LONG SPAN SERIES

The MetalWrap Long Span Series provides flexable options when attaching direct to steel girts up to 6' o.c.



Long Span Vertical with Horizontal Concept Series using Stand Off Clips



Long Span Vertical with Horizontal Subgirts for Vertical Cladding

METALWRAP INTEGRATED OPTIONS

Integrated Windows

INTEGRATED WINDOWS

Featuring CENTRIA's Formavue 600 windows,

MetalWrap is the only insulated composite backup
panel with an integrated window system - which
further enhances air and water performance
and reduces risks for both the architect and the
building owner.



METALWRAP INTEGRATED OPTIONS

Louver Blank Off Panel

LOUVER BLANK OFF PANEL

Inc., the MetalWrap integrated louver system is designed for large areas where louvers are an architectural feature. The system utilizes storm resistant MW-7315 front blades over horizontal MetalWrap Series painted black and MR-300 in the inactive louver area. Both the attachment system and the panel face are painted black, which provides a seamless transition between the active and inactive louvers.

Developed in conjunction with the C/S Group,





www.CENTRIAPerformance.com www.MetalWrap.com

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CENTRIA SERVICE AND SUPPORT

At CENTRIA, we're committed to the idea that form must follow function, the same way great design must be backed by exceptional service and support. CENTRIA's technically trained sales force and teams of experienced engineering and design professionals work with design teams from the firs sketch to the grand opening to troubleshoot and collaboratively solve design challenges.

With over a century of innovation, CENTRIA has developed scientific advances that drive our product development. Our engineers work with commercial construction industry experts to conduct independent research and product testing. It is through this dedication that we've engineered MetalWrap to provide superior function and seamless form for your projects.

CENTRIA DEALER NETWORK

With hands-on product knowledge and extensive training, our elite dealer network is the backbone of CENTRIA support. They are the force behind countless successful projects, providing building teams with the help they need, including training, project pricing and constructability reviews, and superior quality installation to ensure the job is done right.

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CENTRIA serves the international building community with comprehensive products and services. Throughout Europe, Asia, Africa, the Middle East and beyond, architects are experiencing the architectural innovation found only through CENTRIA. Learn more at global.centria.com

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