

ARCHITECTURAL METAL WALL AND ROOF SYSTEMS



## **CENTRIA FORM MEETS FUNCTION**

CENTRIA is the world's leading innovator and manufacturer of high-performance building enclosure systems, including insulated and non-insulated metal composite wall and roof systems and field-assembled metal wall and roof systems. The hallmark of CENTRIA systems is Advanced Thermal and Moisture Protection (ATMP®) combined with unprecedented design freedom and a commitment to sustainablity. CENTRIA's design, engineering and sales support teams, backed by more than a century of experience, are ready to assist with your project.

#### **ABOUT CENTRIA ATMP®**

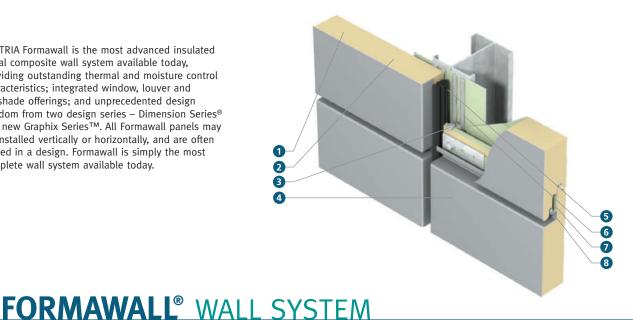
Part philosophy, part science, ATMP - Advanced Thermal and Moisture Protection – guides CENTRIA product design and manufacturing. ATMP's goal is to maximize a wall or roof system's ability to effectively control moisture, without sacrificing thermal efficiency. This is accomplished through design and engineering that leverage real-world forces of nature. Formawall embodies the principles of ATMP.

#### **BEYOND GREEN**

CENTRIA Formawall® Dimension Series® insulated metal composite wall system is the first-ever exterior wall system to earn Cradle-to-Cradle Silver Certification<sup>CM</sup>. Following suit, CENTRIA's Versawall<sup>®</sup> insulated metal composite panels, Formawall<sup>®</sup> Graphix Series™ metal wall panels, Concept Series® concealed fastener panels, IW Series concealed fastener panels. Profile Series exposed fastener panels. Versapanel<sup>®</sup> insulated metal composite panels, and Structural Standing Seam Roof Systems were also awarded with Silver Level Certification, and EcoScreen® perforated screenwall panels achieved Gold Certification. The majority of the CENTRIA product line is now certified and recognized for sustainable attributes through Cradle-to-Cradle Certification.



CENTRIA Formawall is the most advanced insulated metal composite wall system available today, providing outstanding thermal and moisture control characteristics; integrated window, louver and sunshade offerings; and unprecedented design freedom from two design series - Dimension Series® and new Graphix Series<sup>™</sup>. All Formawall panels may be installed vertically or horizontally, and are often curved in a design. Formawall is simply the most complete wall system available today.





**CENTRIA.com** 

#### For complete details and specifications visit

Parkwest Medical Center Knoxville, TN Architect:



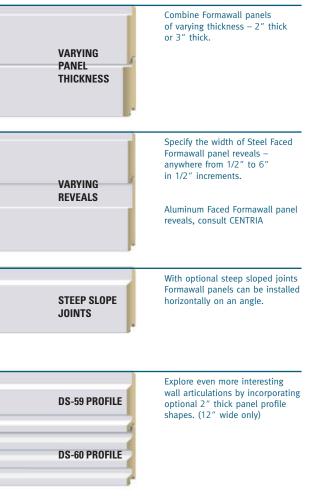
- 1 Non-absorbing closed-cell foam core insulation.
- 2 Insulation is located outboard of supports (not between supports), maximizing its thermal efficiency
- 3 Shop-applied, non-curing sealant at the back of the horizontal joint creates a protected, continuous, uninterrupted air and vapor barrier when connected to the vertical primary seals
- 4 Simple, one-piece design reduces the risk of improper installation, so prevalent with multiple component wall systems
- 5 Durable neoprene gasket deflects water from reaching the primary seals in vertical joints
- 6 Double rows of protected, non-curing sealant are applied as the primary seal for moisture penetration and air infiltration at vertical joints

7 Thermal breaks enhance thermal efficiency

8 Patented, vented, rainscreen and pressureequalized joinery with vents continually along the panel length makes water penetration at horizontal joints virtually impossible through pressure equalization

### 074000/CEN **BuyLine 9165**

With Formawall<sup>®</sup> Dimension Series<sup>®</sup>, designers combine panels of varying thickness, width of reveal, and profile shape to give walls unique articulations and shadows.



#### SUBSTRATE & CORE

- Standard 22/26 gage G-90 galvanized steel face and liner with HCFC-free polyurethane or polyisocyanurate foam-insulated core
- Optional gages available consult CENTRIA
- Optional stainless steel face sheet, 304 stainless steel, 22 or 20 gage, smooth, embossed or striated
- Optional .040 Aluminum Face (2" thick only), flat embossed or smooth striated\*\*

#### **IOINERY**

- Horizontal oriented panel Rainscreen, pressure-equalized and drainable joinery, 1/2" nom. joint – standard
- Vertical oriented panel Double tongue-and-groove, 1/8" nom. joint - standard

#### SURFACE FINISH

- Exterior Non-directional embossed flat or striated Smooth flat or striated
- Interior Non-directional embossed planked or flat Smooth planked

#### PANEL WIDTH

• Available from - 10" to 40"

#### PANEL LENGTH (Steel Face)

- Smooth 16' max.
- Embossed striated 37' max.
- Embossed 37' max.
- Smooth striated 20' max.
- Duracast 28' max.

### PANEL LENGTH (Aluminum Face)

• Embossed - 12'6" max. • Smooth striated - 12'6" max.

#### PANEL THICKNESS/DEPTH OF REVEAL

- 2" with 1-3/16" deep reveal standard
- 3" with 2-3/16" deep reveal

#### **"R" VALUE**

- 2" panel with 1/2" reveal R14
- 3" panel with 1/2" reveal R21
- R-Values are based on ASTM C1363.
- Air films are included.





### FORMAWALL® DIMENSION SERIES®

New Jersey Economic Development Authority Waterfront Technology Center at Camden Trenton, NJ Architect: Ballinger Philadelphia, PA



#### **OPTIONS**

- Formavue® Windows Full line of windows for any framing type that integrate mechanically with Formawall panels for the highest performing panel/window interface
- C/S Sunshades Attractive and functional sunshades designed specifically for thermal and structural integration with Formawall panels and Formavue windows
- C/S Louvers High-quality line of fixed, drainable and storm-resistant louvers engineered specifically for fast and easy integration with Formawall panels
- Stainless Steel A strikingly beautiful choice of substrate that instantly elevates any project to a higher echelon
- Duracast<sup>®</sup> Textured Finish Create a textured wall appearance with this durable textured coating. Available in eight standard natural earthtones

\* All data shown for flat panels only.
 \* Patent No.: US 6,253,511; 6,627,128; 6,968,659 Canada 2,351,846
 \*\* Length restrictions apply, please consult CENTRIA

Consult CENTRIA for profiled panel information.

Formawall<sup>®</sup> Graphix Series<sup>™</sup> segmented construction creates the illusion of multiple smaller panels from a single large wall panel – easily and economically.

- Segments can be specified as frequently as every 12" across the length of a Formawall panel for virtually unlimited grid like design possibilities.
- Add Formawall panel reveals 1/2" to 6" to a Graphix Series design for even more possibilities.
- Reduced length of weather joints leads to reduced risk of leaks.
- Faster erection/assembly.

NOTE: Graphix Series panels are not available with DS-59 or DS-60 panels, in stainless steel, or with a striated surface finish. Maximum panel length is 20'.

EASILY CREATE THESE COMPLEX PATTERNS FROM FEWER PANELS

The appearance of nine individual panels is created from just three Graphix Series panels.



The appearance of 28 individual panels is created from just five Graphix Series panels.



## FORMAWALL<sup>®</sup> GRAPHIX SERIES<sup>™</sup>

For complete details and specifications visit CENTRIA.com

### GRAPHIX SERIES DESCRIPTION

#### Insulated metal composite wall panel system

#### **SUBSTRATE & CORE**

- Standard 22/26 gage G-90 galvanized steel face and liner with HCFC-free polyurethane or polyisocyanurate foam-insulated core
- Optional gages available consult CENTRIA
- Optional .040 Aluminum face (2" thick only), embossed\* and smooth

#### **JOINERY**

Unique segmented

construction

- Horizontal oriented panel Rainscreen, pressure-equalized and drainable joinery, 1/2" nom. joint standard
- Vertical oriented panel Double tongue-and-groove, 1/8" nom. joint standard
- Segmented joint 5/8" x 3/4" deep embossment with factory applied black gasket, standard
  - Max. segments per panel 12
  - Min. length of segment 1'

#### SURFACE FINISH

- Exterior Non-directional embossed Smooth flat
- Interior Non-directional embossed planked or flat Smooth planked

#### PANEL WIDTH

• Avalable form 10" to 40"

#### **PANEL LENGTH (Steel Face)**

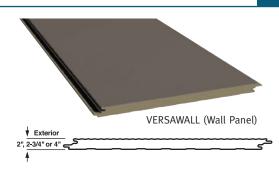
• 20' max.

#### **PANEL LENGTH (Aluminum Face)**

- Embossed, Flat Overall Max. Length 12'6" – Max. Length of Segment – 11'6"
  - Min. Length of Segment 12"
  - Max. Number of Segments 12
- Smooth, Flat
  - Overall Max. Length 12'6"
     Max. Length of Segment 4'
    - Min. Length of Segment 12"
    - Max. Number of Segments 12

#### PANEL THICKNESS

- 2" standard
- 3" consult CENTRIA





Versawall and Versapanel (Cradle-to-Cradle certified) insulated metal composite panels install vertically to create a wall with advanced thermal and moisture protection properties.

Architects enjoy the systems' ability to provide long, uninterrupted sight lines – up to 48 feet. Plus, Versawall and Versapanel wall panels can be coated with CENTRIA Duracast® to provide a natural textured look.

Versapanel is extra-versatile. With its bold standing seam, Versapanel doubles as a high-performance insulated roof when combined with its watertight, snap-on batten cap.

### DESCRIPTION

Insulated metal composite wall and roof system

#### **SUBSTRATES**

- Standard 26/26 G-90 galvanized steel face and liner with HCFC-free foam insulated core
- Optional gages available, consult CENTRIA

#### JOINERY

- Double tongue-and-groove joinery with factory-applied air and vapor seal Surface Finish
- Versawall Exterior Non-directional embossing, flat, striated or planked. For non-embossed and non-striated consult CENTRIA
- Versapanel Exterior Non-directional embossing, planked or flat
- Interior Non-directional embossing, planked
  Optional Duracast textured finish is available for Versawall and Versapanel wall applications, consult CENTRIA for panel

## length options PANEL WIDTH

- Versawall 30", 36"
- Versapanel 36"

#### PANEL LENGTH

- 6' to 40' standard
- 48' max. consult CENTRIA

#### **PANEL THICKNESS**

- Versawall 2", 2-3/4", 4" nom.
- Versapanel 1-3/4", 2-1/2", 4"

#### "R" VALUE

- Versawall
- 2" depth R14
  2-3/4" R20
- 4" R27
- Versapanel
- 1-3/4" R14
- 2-1/2" R19
- 4" R27
- R-Values are based on ASTM C1363 Air films are included.



074000/CEN

BuyLine 9165







Unlike ordinary ACM - made by lamination, then fabricated into panels by a second party - FormaBond is manufactured entirely by CENTRIA using a proprietary reaction injection molding process. The result is a stronger, flatter, finished ACM panel, with a pressure-equalized open, dry joinery.

The panels' joinery are engineered to prohibit the entry of water without using sealants. Yet, because of its open design, this joinery also provides optimum venting to allow wall cavities to dry any residual vapor or moisture.

CENTRIA also provides window, louver and sunshade components that are engineered to integrate with FormaBond panels.





## FORMABOND® WALL SYSTEM

For complete details and specifications visit CENTRIA.com

### DESCRIPTION

#### Aluminum composite wall panel system

#### **SUBSTRATE & CORE**

- Metal 0.032" nominal aluminum face and liner • Core – Highly cross-linked polymer that meets
- fire code requirements • 8mm sheet thickness (6mm optional)
- Smooth, Fusion, Embossed, Braided or Honeycomb Surface Finish

Fusion	Embossed
Braided	Honeycomb

#### **JOINERY**

All dry construction that is pressure equalized and provides ventilation to the inner wall cavity

#### **PANEL WIDTH**

• Up to 60"

#### PANEL LENGTH

• Up to 180"

#### **VARIABLE REVEALS**

• From 1/2" to 6" in 1/2" increments. May also be colorized

#### COATINGS

• Available in micas, metallics, and Fluorofinish

#### PERFORMANCE

- High performance air and water testing
- Pressure-equalized joinery
- AAMA 508-05

The ribs of these six interchangeable panels are based on an identical asymmetrical form. Thousands of combinations of patterns, articulations, shadows and sight lines may be achieved by creatively combining these panels in either vertical or horizontal orientations.

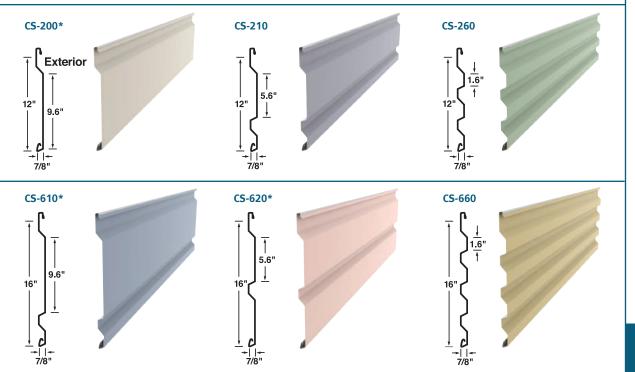
#### DESCRIPTION Concealed fastener pre-formed wall panel system

#### **SUBSTRATES**

- Standard 22-18 gage G-90 galvanized steel
- Optional 24 gage CS-260 and CS-660 only
- Galvalume<sup>®</sup> steel, aluminum or stainless steel optional
- Smooth or embossed surface texture

#### **CONCEPT SERIES PROFILES**

- Lengths up to 30'
- Concealed clips and fasteners
- Stand-off clip provides ventilation cavity and continuous drain plane behind panel
- May be installed vertically or horizontally
- Common joint design permits multiple profile integration
- Concealed fastener extended leg option



#### 074000/CEN BuyLine 9165



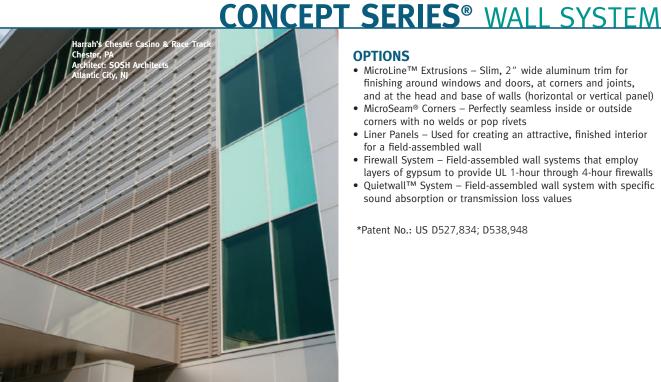
CONCEALED CLIP With Standoff





Concealed with flush clip, consult CENTRIA



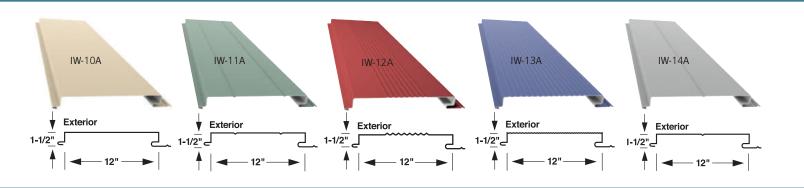


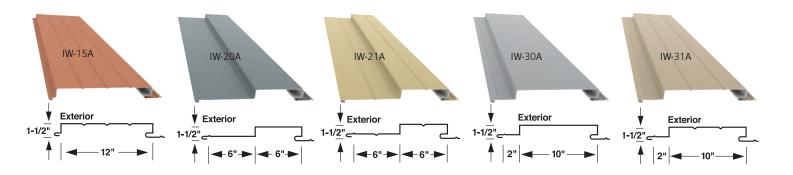
#### **OPTIONS**

- MicroLine™ Extrusions Slim, 2" wide aluminum trim for finishing around windows and doors, at corners and joints, and at the head and base of walls (horizontal or vertical panel)
- MicroSeam<sup>®</sup> Corners Perfectly seamless inside or outside corners with no welds or pop rivets
- Liner Panels Used for creating an attractive, finished interior for a field-assembled wall
- Firewall System Field-assembled wall systems that employ layers of gypsum to provide UL 1-hour through 4-hour firewalls
- Quietwall<sup>™</sup> System Field-assembled wall system with specific sound absorption or transmission loss values

\*Patent No.: US D527,834; D538,948

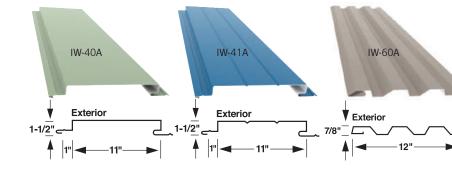
These thirteen panels come in your choice of flat panels or with reveal depths of 1", 2" or 6", with or without pencil bead stiffeners. By combining these panels in either a vertical or horizontal fashion, you're able to create thousands of combinations of attractive wall patterns and designs.











## IW SERIES WALL SYSTEM

For complete details and specifications visit CENTRIA.com

#### DESCRIPTION

Concealed fastener pre-formed wall panel system

#### **SUBSTRATES**

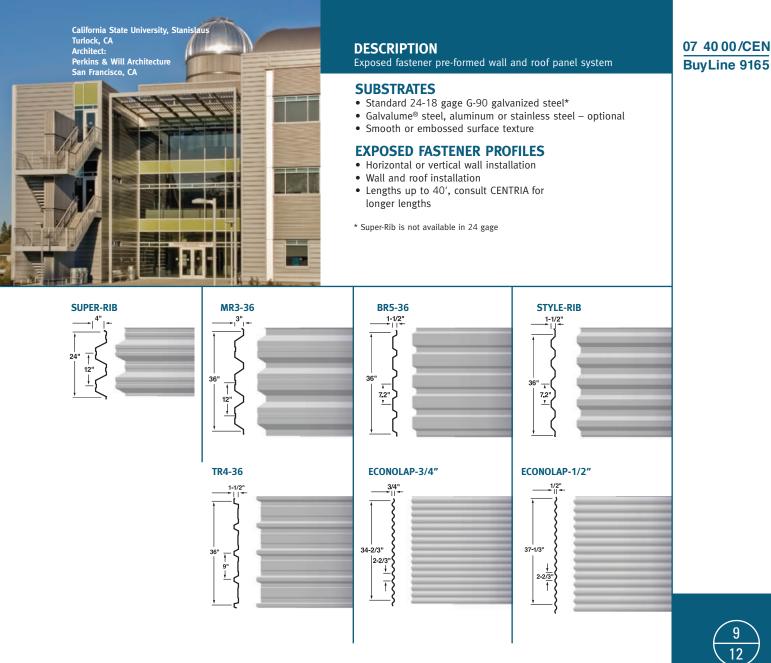
- Standard 22-18 gage G-90 galvanized steel
- Optional 24 gage IW-13A, IW-21A and IW-60A
- Galvalume® steel, aluminum or stainless steel optional
- Smooth or embossed surface texture

#### **IW SERIES PROFILES**

- Lengths up to 30'
- Horizontal or vertical wall installation
- Lock-joint design of IW-10A through IW-41A makes panels interchangeable
- 2" swaged laps are available in gages lighter than 18. Not available for IW-12A, IW-14A, IW-15A and IW-60A

#### **OPTIONS**

- MicroLine<sup>™</sup> Extrusions Slim, 2" wide aluminum trim for finishing around windows and doors, at corners and joints, and at the head and base of walls (horizontal panels only)
- MicroSeam<sup>®</sup> Corners Perfectly seamless inside or outside corners with no welds or pop rivets (IW-60A only)
- Liner Panels Used for creating an attractive, finished interior for a field-assembled wall
- Firewall System Field-assembled wall systems that employ layers of gypsum to provide UL 1-hour through 4-hour firewalls
- Quietwall<sup>™</sup> System Field-assembled wall system with specific sound absorption or transmission loss values



### EXPOSED FASTENER WALL & ROOF SYSTEM

CENTRIA manufactures seven exposed fastener profile panels. In addition to wall panels, these versatile panels may also be used for roofing, and soffit applications, they are readily curved for walls, canopies, awnings, parapets, column and beam wraps and more. Like all CENTRIA profile panels, these panels can be mixed and matched to create virtually unlimited designs.

#### **OPTIONS**

- MicroLine<sup>™</sup> Extrusions Slim, 2" wide aluminum trim for finishing around windows and doors, at corners and joints, and at the head and base of walls (BR5-36, Style-Rib, TR4-36 and Econolap 3/4" Horizontal only)
- MicroSeam<sup>®</sup> Corners Perfectly seamless inside or outside corners with no welds or pop rivets (all profiles except Econolap 1/2")
- Liner Panels Used for creating an attractive, finished interior for a field-assembled wall
- Firewall System Field-assembled wall systems that employ layers of gypsum to provide UL 1-hour through 4-hour firewalls
- Quietwall<sup>™</sup> System Field-assembled wall system with specific sound absorption or transmission loss values
- Curving is available in a wide selection of exposed fastener profiles, finishes and colors to match virtually any architectural, commercial or industrial application.

## **ECOSCREEN®** PERFORATED SCREENWAL

CENTRIA offers exterior and interior perforated screenwall panels using CS-260, CS-660, Econolap 3/4", MR3-36, Style-Rib, and BR5-36 in 20 gage stainless steel and 0.040" painted aluminum. This unique fabrication provides a 10% to 40% open area for the effect of a translucent screen to control light, air movement and provide safety and security.

Perforated screenwalls can help blend industrial and other functional applications with the surrounding communities.

Please consult CENTRIA for optional panels and perforation patterns. Paint finish not warranted in perforated panels.







### DESCRIPTION

SRS® Structural standing seam roof system

#### **SUBSTRATES**

- SRS 2 24-20 gage
- SRS 3 24-18 gage
- G90 galvanized steel, Galvalume, stainless steel, and aluminum

#### PANEL WIDTH

• 12", 16", 18"

#### **PANEL DEPTHS**

- SRS 2-2"
- SRS 3-3"

#### **PANEL LENGTH**

- Factory-formed up to 48'-0" max. standard, up to 60'-0" – optional
- Field-formed 220'-0" max.

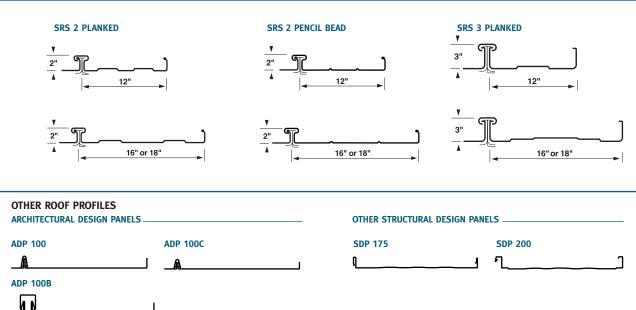
Oil canning within industry standard guidelines as defined by MCA is not a cause for rejection.



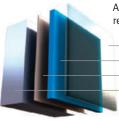
SILVER

### **SRS®** STRUCTURAL STANDING SEAM ROOF SYSTEMS

For complete details and specifications visit CENTRIA.com



#### SUNDANCE AM-ALUMINIUM METALLIC 3-COAT FINISH



A quality, durable coating providing the iridescence and reflectivity of a metallic surface.

> .5 mil nominal Polyvinylidene Fluoride Clear Coat\* .8 mil nominal Polyvinylidene Fluoride Color Coat\* .2 mil nominal Primer

Substrate



#### SUNDANCE MICA\* 2-COAT FINISH

A Kynar 500<sup>®</sup>, Hylar 5000<sup>®</sup> or FEVE-based coating providing good durability.

> .8 mil nominal Color Coat 2 mil nominal Primer Substrate

#### **DURAGARD® PLUS**

A premium, high build architectural coating providing the ultimate in color retention and fade resistance.

> .8 mil nominal Polyvinylidene Fluoride Clear Coat\* .8 mil nominal Polyvinylidene Fluoride Color Coat\* .8 mil nominal Primer

#### Substrate

#### **DURAGARD®**

.8 mil nominal Polyvinylidene Fluoride Color Coat\* .8 mil nominal Primer

#### FLUOROFINISH®\* AND 2-COAT BRILLIANT™

A Kynar 500<sup>®</sup>, Hylar 5000<sup>®</sup> or FEVE-based coating providing good durability.

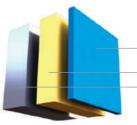


.8 mil nominal Color Coat .2 mil nominal Primer

#### **VERSACOR® ULTRA**

A premium, high build, multi-layer coating for applications where corrosion and abrasion resistance is more important.

VERSACOR® ULTRA PF. TF and HF An excellent coating for corrosive architectural applications.



0.8 mil nominal PVDF Coat or 1.5 or 3.0 mil nominal Urethane Coat

3.0 mil nominal Versacor Ultra Barrier Coat Substrate

#### **DURACAST® TEXTURED FINISH SYSTEM\*\***

Factory-applied coating with natural aggregate matrix providing the look and feel of precast. Available exclusively for Formawall Dimension Series, Formawall Graphix Series and Versawall panels.



Acrylic and Natural Aggregate Matrix

- .8 mil nominal Polyester
- .2 mil nominal Primer
- Substrate

#### AVAILABLE SUBSTRATES

- Standard G-90 hot-dip galvanized steel conforming to ASTM A924 and ASTM A653 structural steel
- Galvalume steel, unpainted hot-dip coated with aluminumzinc alloy conforming to ASTM A924 and ASTM A792 for heat and corrosion resistance
- Stainless Steel\*\*, Type 304 AISI architectural grade alloy; austenitic, non-magnetic, non-glare surface; slight variation in surface finish
- Aluminum Alloy 3003 or 5052, and for standing seam roof panels, 3004\*\*, available in smooth surface as a substrate

NOTE: Galvalume, stainless and aluminum may not be available for all product profiles or coating systems. Consult CENTRIA sales. Galvalume offers improved heat resistance only when used unpainted.



### COATING SYSTEMS AND SUBSTRATES

CENTRIA has devoted more than 100 years to the art and science of producing color coated metal walls and roofs that impart the very best in aesthetics and performance. This includes a wide variety of high-quality coating systems, a full palette of colors and a range of substrates and surface textures to meet even the most demanding environmental conditions.

#### THE INDUSTRY'S WIDEST ARRAY OF COLORS

CENTRIA offers you a full array of colors (see CENTRIA Colors brochure) including micas and bright metallics.

#### **CUSTOM COLOR MATCHING**

CENTRIA is also equipped with the latest color matching technology enabling us to provide fast turnaround on even the most unique or unusual colors. For complete information on CENTRIA coating systems, contact us for a copy of our coatings brochure.

Polyvinylidene Fluoride (PVDF) coat contains 70% Kynar 500 or Hylar 5000 resin. Kynar 500 is a Reg. TM of Atofina Chemicals, Inc. Hylar 5000 is a Reg. TM of Solvay Solvents, Inc. Galvalume is a Reg. TM of BIFC International Inc.

\*\* Subject to minimum quantity requirements.

What is Backside Coating Protection?

On most of CENTRIA's Profiled Series panels with a Versacor Ultra coating system, an additional Versacor Barrier Coating is applied to the interior of the metal substrate. Then either a Urethane top coat, wash coat or primer are applied over the barrier coat. This additional coating protects the metal against corrosion from the interior. Another reason Versacor Ultra provides superior protection.



## 1.800.586.1372

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Boston, MA Phone: 978.779.7929 Fax: 978.779.7930

Hartford, CT Phone: 860.659.4045 Fax: 860.659.4034

Newark, NJ Phone: 973.857.1405 Fax: 973.857.1406

New York, NY Phone: 914.834.7697 Fax: 914.833.1843

Philadelphia, PA Phone: 215.643.6040 Fax: 215.643.0629

Pittsburgh, PA Phone: 412.299.8175 Fax: 412.299.8016

Syracuse, NY Phone: 315.214.3753 Fax: 315.214.3753

Washington, DC Phone: 703.406.9588 Fax: 703.406.9457

### 1.800.759.7474

1005 Beaver Grade Road, Moon Township, PA 15108-2944 Phone: 412.299.8000 Fax: 412.299.8317

# SOUTH CENTRAL REGION 1.800.586.1372

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San Francisco, CA Phone: 650.369.9400 Fax: 650.369.9483

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Seattle, WA Phone: 253.460.3779 Fax: 253.460.1664

Southern California (Los Angeles) Phone: 949.589.0997 Fax: 562.690.1610

Office of Business Development Phone: 860.490.2670

## www.CENTRIA.com

CENTRIA products have inherent sustainable characteristics. Our products are primarily composed of steel and other metals which have been, and can repeatedly be, recycled. Our factory foamed insulation provides an insulation value in excess of alternative systems saving energy cost and fuel resources.

CENTRIA also offers specific high-performance, sound-reducing products to protect the environment from machine or process-generated noise pollution.









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