

REIMAGINE RETROFIT

75% of building owners said that cost was the primary reason to choose an exterior retrofit over new construction.*

CENTRIA: THE RIGHT FIT

Every exterior retrofit project is unique. Once you decide to reskin a building, there are unique facility and installation challenges that need to be addressed. Each building team assembled is distinctive. Each building owner's needs and requests are individual. Climates, geographies as well as state and local building codes are also specific to each retrofit.

It takes an exceptional partner who doesn't take a one-size-fits-all approach to exterior retrofit projects — one that is uniquely qualified to provide the right products along with the right expertise — to help make the exterior retrofit process go smoothly.

CENTRIA provides an unparalleled line of architectural metal wall systems for any exterior retrofit project. Just as important is our experienced team of building experts that understands the challenges and opportunities that each of these projects bring.



Larimer Office Complex



RETROFIT EXPERIENCE

Expertise isn't just measured in years, it's measured in actual experience. When it comes to CENTRIA's exterior retrofit experience, our proficiency and portfolio are hard to match.

From government, healthcare, and educational facilities to multi-residential, mixed-use and manufacturing structures, CENTRIA's products and its team of experts have participated in thousands of retrofit projects across the globe. The collective experience accumulated on each retrofit project in a variety of commercial building markets is a testament to our ability to treat each retrofit project individually.

CENTRIA products are featured on retrofit projects, both large and small, because of their aesthetic and performance characteristics. Often, a CENTRIA team of experts is assembled before the products have been specified to address the retrofit and prepare for any unexpected challenges that the project may encounter. It is this additional project support, combined with our extensive experience, that makes CENTRIA the right choice for any architect or building owner considering an exterior retrofit.

Energy efficiency and the image the building presents are the two most common reasons to do an exterior retrofit.



THE RIGHT PRODUCTS

Our continuous efforts to deliver innovative building envelope solutions have resulted in one of the widest selections of metal wall and roof panels in the industry today. Whether the reason for a retrofit is a new exterior appearance, improved energy performance, or damage repair, CENTRIA products can rise to and overcome the challenge.

Insulated Metal Panels



- Formawall* Dimension Series*
- Formawall Graphix Series[™] with Directional Reveals
- Versawall[®] Panels
- Versapanel* Wall & Roof Panels

CENTRIA's architectural insulated metal panel (IMP) systems provide the industry's best combination of aesthetics, performance, sustainability and value. For retrofit projects, IMPs not only transform a building's exterior aesthetic, but also dynamically improve its thermal efficiency and moisture control — lowering a building's initial construction cost while improving energy efficiency over the life of the building.

Insulated Composite Back-up Panels



MetalWrap[™] Series

CENTRIA's insulated composite backup panels (ICBP) offer an innovative and fully tested single-panel alternative to the standard multi-component wall assemblies. These systems are a perfect fit for retrofit projects where the exterior of the building needs to complement its existing non-metal surroundings or campus because they can be used with metal, brick, terra cotta and other exterior façade materials. These systems are manufactured using a high volume of recycled content and minimize jobsite waste.

Metal Composite Materials



- Formabond[®] Aluminum and Metal Composite Wall System
 Formabond[®] II Aluminum and Metal
- Composite Wall System

CENTRIA's Metal Composite Material (MCM) systems provide significant value to retrofit projects. Due to their light weight, they reduce structural requirements and the subsequent costs. The manufacturing process involves taking two sheets of smooth metal and bonding them to an injection-molded, cross-linked polymer core. This process occurs under very precise conditions of temperature and pressure, ensuring the sheets are flat. As a result, they stand up to the elements, resulting in reduced longterm maintenance costs.

Single Skin Rainscreens



- Intercept[™] Modular Panel System
- CASCADE[™] Metal Panel System
- Concept Series* Concealed Fastener Panels
- IW Series Concealed Fastener Panels
- Exposed Fastener Panels
- EcoScreen* Perforated Screenwall

CENTRIA's single-skin metal panels make it possible to achieve a variety of innovative aesthetics. Available in a multitude of profiles and depths, an unlimited number of metal panel wall designs are achievable. When a project calls for a higher level of insulation, the panels can serve as an excellent rainscreen when combined with an insulated composite backup panel. All-weather installation shortens construction time and permits fast-track scheduling — a key benefit for any exterior retrofit.

THE RIGHT PEOPLE

Beyond products that perform, it's the people and their collective expertise, specifically in exterior retrofit projects, that separates CENTRIA from the pack. Our people make it their mission to understand our customers' expectations, so they can deliver superior quality products, as specified, on time and on budget. In addition, since every retrofit project is different, we identify the right team to help you determine the best products and installation options for your project's particular challenges.



Knowledgeable Sales Force

Our sales team works with architectural and design-build firms of all sizes on a wide range of retrofit projects. They come to each job with no preconceived notions on which products your retrofit project needs. Rather, we rely on a consultative and collaborative process where they learn the building owner's vision and how to best achieve it with the architect's design. The result is a personalized sales experience that ultimately leads to a customized exterior retrofit solution.



Elite Dealer Network

Once products are selected, our elite Dealer Network works collaboratively with the architect and general contractor to ensure that the products you need are delivered when and where you need them while staying within the project budget. As CENTRIA product and installation experts, they also provide job site expertise and support, ensuring that the retrofit project matches the vision of both the building owner and the contractor.



Engineering & Design Experts

Our Engineering & Design (E&D) group is a dedicated team of experts who are constantly innovating and reimagining ways to improve wall aesthetics, performance, sustainability and value. They don't just do this for our products—they also do it for your projects. With hundreds of retrofit projects in their portfolio, there are few challenges this team hasn't encountered and engineered a solution for using our wide range of exterior panel and attachment systems. **Only 13%** of contractors said their companies have a person who is dedicated to exterior-wall retrofit projects.



CENTRIA's ATMP® technology allows Formawall Dimension Series insulated metal panels to provide superior thermal and moisture protection.

CENTRIA insulated metal panels can be designed to address seismic movements when required by the project.

EcoScreen panels provide open area for the effect of a translucent screen to control light, provide air movement and security, and conceal objects behind the screen.

DMV Headquarters Sacramento, CA



Building Owner

Department of Motor Vehicles State of California

Architect

Lionakis Sacramento, CA

General Contractor

SJ Amoroso Redwood City, CA

CENTRIA Dealer

Pacific Erectors, Inc. Rocklin, CA

REJUVENATING A GOVERNMENT OFFICE COMPLEX

The Sacramento DMV required a complex, phased construction design because the site improvements needed to take place while the building was occupied and functioning. The renovation included complete seismic analysis and retrofit, hazardous material abatement, new mechanical and electrical systems and a complete building reskin.

This remodel, the largest ever by the California Department of Motor Vehicles, took nearly a decade and a half to complete. CENTRIA's Formawall Dimension Series insulated metal panel system was chosen by the building team for a number of reasons including performance, aesthetics and sustainability, but the system's performance and rigorous industry testing was also a primary reason for its selection. In one aesthetic panel, Formawall provides a superior weather, air, vapor and thermal barrier. Furthermore, Sacramento's location is prone to earthquakes, and CENTRIA's metal architectural insulated foam panels have a distinct advantage for use in seismic areas. These panels have a tongue-and-groove design and are attached only on one side, granting the panels slight movement to minimize potential damage.

From an energy savings standpoint, the new skin of insulated metal. panels and glass is significantly more efficiently insulated than the old one, resulting in reduced heating and cooling costs. The southwest corner has a second skin because it receives the most sunlight, and the design saves energy in winter and summer. In addition. Profile Series Ecoscreen Econolap integrated well with the other CENTRIA panels and glass, providing an airy aesthetic and outstanding performance that elegantly blends the building into its surroundings.



After evaluating glass, precast and metal as exterior envelopes, the owners chose metal based on the aesthetics and value the insulated metal panel system provided, as well as their ability to integrate seamlessly with CENTRIA's Formavue™ window system. With CENTRIA's help, the architect's support design was subtly reconfigured. A complex gridwork was simplified by using an efficient through-tube support system—a curtainwall system using steel tubes that ran behind the panels.

The material of the metal building skin afforded this contemporary form, and made the statement not only one of restoration, but also one of durability and permanence. NEW ORLEANS EAST HOSPIN

New Orleans East Hospital New Orleans, LA





Building Owner

Publicly Owned

Architect

Eskew+Dumez+Ripple Manning Architects New Orleans, LA

Associate Architect

WHLC Architecture Baton Rouge, LA

General Contractor

The LeMoine Company New Orleans, LA

CENTRIA Dealer

Crown Corr, Inc. Gary, IN

REHABILITATING A RAVAGED COMMUNITY HOSPITAL

Rebuilding after a storm as devastating as Hurricane Katrina does not happen overnight. New Orleans East Hospital, formerly known as Pendleton Memorial Methodist Hospital, was destroyed by flooding during the massive storms of 2005. This once thriving hospital was a microcosm of the region, decimated and in need of not just improvement, but enhancements that could withstand another catastrophic event.

To better protect against future storms, the building envelope on the East tower of the hospital needed to be strengthened so it could withstand wind speeds in excess of 130 mph. There were all types of exterior cladding options considered, but the build team chose a metal system because of the cost and the added value provided by CENTRIA engineers.

CENTRIA's Formawall Dimension Series insulated metal panel system was the perfect choice because it was not only tested for hurricane loads and met code requirements for structure, air, water, and impact performance, but also because the main facade of the building was curved with a large radius. Rather than specifying a radiused panel, CENTRIA was able to chord the panels. Utilizing shorter-length straight panels that were chorded helped to reduce the project costs, while at the same time offering a modern aesthetic with a highperformance wall panel that would protect against thermal and moisture intrusions.

New Orleans Hospital East is an excellent example of CENTRIA's abilities from a design and engineering perspective when it comes to exterior retrofits.



CENTRIA's Concept Series and IW Series provided a cost-effective way to create a clean, seamless appearance, along with interesting visual effects.

CENTRIA's Formawall Graphix

Series with Directional Reveals

such as vertical, horizontal or

PERN TAN ACADEMT

A CONTRACTOR OF THE OWNER OF

allows for a wide array of reveals

sloped. This particular installation illustrates a vertical orientation.

1111 IIIII

a standard

The all-weather installation capability of CENTRIA panels made them an asset to the contractors by enabling them to keep the project on schedule and on budget regardless of the weather.

Penn Yan Academy

Penn Yan, NY



Building Owner

City of Penn Yan Penn Yan, NY

Architect

King & King Architects Syracuse, NY

General Contractor

Spoleta Construction Rochester, NY

CENTRIA Dealer

Arrow Sheet Metal Works, Inc. Buffalo, NY

REINVIGORATING A CENTER FOR LEARNING

Penn Yan Academy in New York's picturesque Finger Lakes region provides an intellectually stimulating learning environment for students in grades 9–12. However, while the teachers, students and staff created a vibrant atmosphere inside, the actual building was woefully outdated and not conducive to a modern learning environment.

A major goal of this project was to renovate the existing 1962 facility to meet current code requirements. Nearly all mechanical, electrical, and plumbing systems were replaced to optimize energy efficiency, including any required asbestos abatement.

Additionally, the school district's intent was to update the envelope with a state-of-the-art exterior and continue that into the interior space. The existing building had a curtainwall system that had been in place for some time. School officials wanted to maintain the functions of this system but bring the efficiency, color, and style up to date. Ease of installation also was part of the equation. The selection of metal panel systems met their needs.

One of the many benefits of installing CENTRIA's Formawall Dimension Series as well as its Concept Series and IW Series panels on this particular retrofit was installation time. The insulated metal panels were modular and easily applied to the existing structure. Construction had to be done in short bursts during summers and school holidays, and the quick installation was a great asset to the series of tight schedules.

The best part of finishing a long-term project such as this is not only the lasting visual appeal, but also the enduring energy efficiency for the school district



The Formavue window system offers integrated head, sill and jamb details that feature thermal breaks aligned with the panel insulation for one of the most efficient integrated window systems on the market today. Additionally, the project features CENTRIA's Versapanel insulated metal panels (not pictured). Offering versatility and flexibility, this highly energy-efficient wall system is defined by bold ribs that add an attractive linear definition to projects.

Two of the products on this project, Formawall Dimension Series and Versapanel, have received Environmental Product Declarations. Manufactured from recycled materials, these panels contribute to sustainability initiatives by offering long product life-cycles and less jobsite waste.

Buescher Hall – East Central College Union, MO



Building Owner

East Central College Union, MO

Architect

The Lawrence Group St. Louis, MO

General Contractor

K&S Associates, Inc St. Louis, MO

CENTRIA Dealer/Installer

Mays Maune McWard, Inc Fenton, MO

REINVENTING A COLLEGE LANDMARK

Located on the historic East Central College campus, the newly renovated Buescher Hall previously served as the institution's library. Established in 1968, East Central College is a twoyear institution that serves a wide variety of students in the Union, Mo. area. As the oldest facility on campus, the hall lacked the modern amenities necessary to facilitate an engaging learning environment. The building's interior and exterior renovations were designed to reflect the modern architecture found on other campus buildings thereby unifying the campus.

The precast panels that had previously been on the exterior of the facility were removed and replaced with windows to usher in natural light. Green products were utilized throughout the structure, including skylights, energy-efficient windows, a high-efficiency water heater, a reflective roof surface and a highperformance HVAC system. CENTRIA's Formawall Dimension Series insulated metal panels and integrated windows were chosen for both their aesthetic and performance benefits. Designers mixed and contrasted colors on the new exterior to provide a contemporary look and revitalize the once-aging facility.

With Formawall's unique ability to seamlessly integrate windows and other features, designers were able to remove some of the former precast panels and replace them with Formavue windows. The result is a high-performance, thermally efficient window, panel and sunshades interface that not only maximizes natural light but also eliminates receptor extrusions and ensures superior weather resistance.



CENTRIA panels come in a wide range of colors and coatings. This project used two of CENTRIA's coating systems. Sundance AM is a durable coating that incorporates metal flakes in the color providing reflectivity of the surface. Sundance Mica provides a pearlescent appearance using a high performance finish that is an excellent, cost-effective alternative to metallic finish systems requiring clear coats.

Formawall Dimension Series provided optimal thermal performance while protecting against water infiltration, a key goal of the Mazza Pavilion building team.

Frank H. Mazza Pavilion Pittsburgh, PA

Design flexibility was critical for this project. The build team chose CENTRIA panels to achieve a modern edge so the building would integrate well into the neighborhood's redevelopment plans.



Dett



Building Owner

Housing Authority City of Pittsburgh

Architect

Rothschild Doyno Collaborative Pittsburgh, PA

General Contractor

Franjo Construction Homestead, PA

CENTRIA Dealer

A.C. Dellovade, Inc. Canonsburg, PA

REVITALIZING AN URBAN SENIOR CENTER

The Frank H. Mazza Pavilion, located in Pittsburgh, Pa., is a senior living community that includes 30 apartments, a private outdoor courtyard and communal space in the main lobby area. The facility's overall design was conceived to improve the quality of life for its senior citizen and disabled residents, while the building's exterior was designed to blend with its surrounding neighborhood.

In 2008, it was discovered that faulty building materials had led to an irreversible mold problem that threatened the safety of the apartments and tenants. The fate of the building was in the balance for more than a year while the City of Pittsburgh's housing authority searched for a solution. In February 2010, money was allocated for a complete renovation of the structure, and by August, the building was stripped to its steel frame and rebuilt from the ground up. A major design goal of the retrofit project was community integration. The building team redesigned the facility specifically to blend with the existing Brookline neighborhood and its business district, while at the same time achieve the city's goal to modernize public housing. Metal offered the perfect solution for combining these goals.

Metal also offered the performance benefit that was needed to prevent water infiltration and mold from occurring again. CENTRIA's Formawall Dimension Series provided optimal thermal performance while protecting against water infiltration, a key goal of the Mazza Pavilion building team.



Building owners cited **Energy Savings** as the leading factor when determining return on investment for an exterior retrofit wall project.*

*Results from an exterior retrofit survey of building owners and contractors. The survey was administered by Scranton-Gillette Communications in partnership with CENTRIA in 2015.



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