

## Introduction

CEI Materials is a Nation-Wide, full service provider of Architectural Cladding Systems and Components. From concept to completion, new construction or retrofit, clients can rely on CEI to deliver the highest standards of quality. At CEI Materials we know what it takes to make your project a success. We will work with you every step of the way, providing innovative technology and excellent service throughout the entire process.



# **CEI Materials: The Company**

CEI was established in 2008 as a leader in the fabrication of Metal Composite Panel systems. Now with over 700 projects installed and over 3,000,000 sqft of architectural panels fabricated to date, CEI excels at assisting Architects and Construction Managers with design assistance and building envelope solutions from coast to coast.

Over the last decade, we have been committed to becoming the foremost provider of architectural façades. CEI now offers a total solution for your cladding requirements, including Metal Composite Materials (MCM), High Pressure Laminate (HPL), Column Covers, Corian® and Aluminum Plate panel systems. In addition, CEI has the capabilities and expertise to provide custom fabricated Sunshades, Louvers, Screen Walls, and Pre-Engineered Modular Structures.



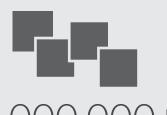


**Projects Installed** 



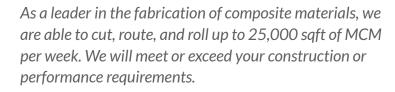
55+

**Employees** 



3,000,000+

Square Feet of Architectural Panels Fabricated to Date







Today CEI Materials occupies a state-of-the-art 70,000+ sqft facility with a trusted presence throughout North America. Although CEI has grown into a larger entity, keeping site of the importance of its people and values remains at its core.



## The CEI Process

At CEI, we want to create open communication between the Architect, Building Owner, Contractor, Manufacturer, and the Fabricator. This is what sets us apart from other fabricators. CEI works with everyone involved on all aspects of the project from the very beginning. This process, which includes Project Management, Design Assist, Fabrication and Installation, is much more efficient and greatly increases any project's success.



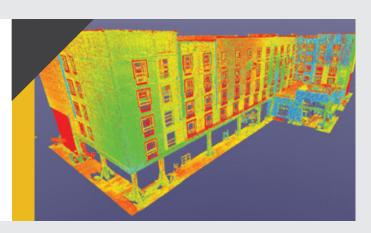


#### **Project Management**

Our experienced Project Managers bridge the gap between CEI (Design, Production and Installation) and the client to reduce risk (schedule, scope, budget and quality) and maximize benefit.

#### **Design Assist & Tech Support**

CEI's team of skilled Design Engineers are innovative and efficient. Our utilization of AutoDesk® Inventor® and Revit® software, allows us to seamlessly integrate architectural renderings for the prompt execution and submission of shop and production drawings.





#### **Fabrication Services**

CEI utilizes the latest CNC technology to provide the architectural designs and tolerances that our clients require. Our equipment, coupled with our experience, permits CEI to deliver precision and speed to every step of fabrication, while specializing in architectural wall panel systems.

# In partnership with our sister company Supreme Metal Solutions (SMS), we provide a single source turn-key solution.

SMS employs experienced installation professionals capable of handling any cladding challenge. Our crews are well trained and operate at the highest level of quality and craftsmanship on every project.



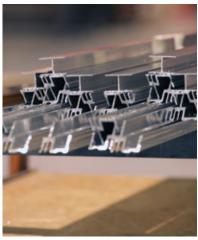
#### **Fabrication Efficiencies**

With fabrication capabilities at our facility in Manchester, Michigan we are capable of producing over a million square feet of architectural panel systems per year. CEI utilizes the latest CNC technology to provide the architectural designs and tolerances that our clients require. Every CEI product meets or exceeds

construction and performance benchmarks so that any project will be of unquestionable quality. This is evidenced by the receipt of fabrication certification through our manufacturing partners Arconic Reynobond®, 3A Composites Alucobond®, Mitsubishi Alpolic®, Fundermax®, and Dupont™.









#### **Installation Efficiencies**

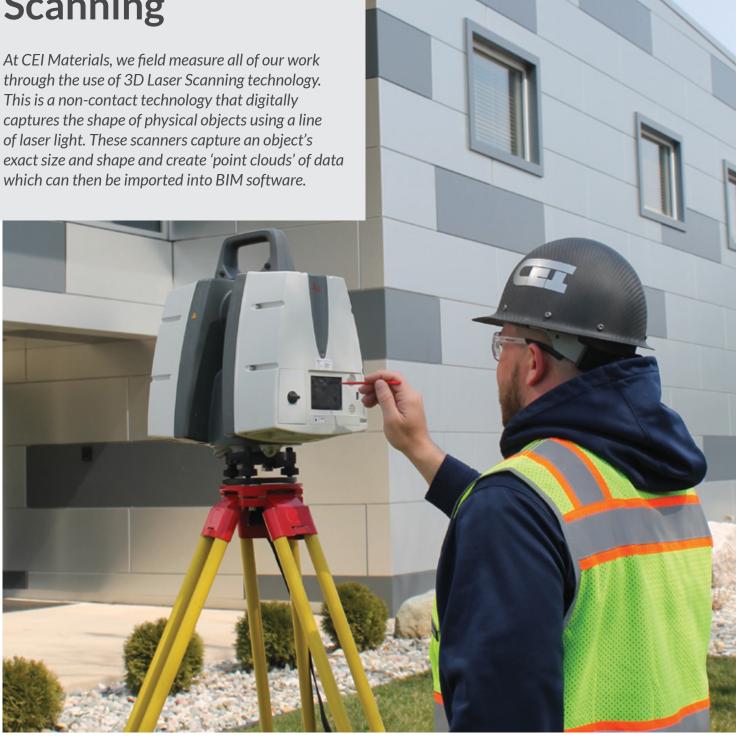
CEI provides all required professional and technical expertise using our in-house resources, as well as skilled subcontractors that have completed all of CEI's stringent training and background requirements. Each project is staffed by experts having developed the practical expertise to address and successfully complete your project. These career professionals possess the educational degrees and industry certifications that authenticate the capabilities of CEI.

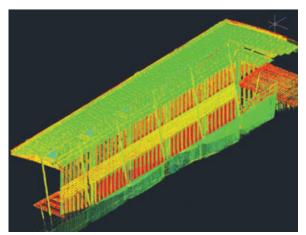
# Tested Systems & Code Compliance

All systems at CEI are tested to ASTM and AAMA standards and are NFPA 285 compliant. It should be noted that NFPA 285 is a wall assembly test not a product test and that not all fabricators have invested in this test.

# 3D Laser **Scanning**

through the use of 3D Laser Scanning technology. This is a non-contact technology that digitally captures the shape of physical objects using a line of laser light. These scanners capture an object's exact size and shape and create 'point clouds' of data which can then be imported into BIM software.







3D laser scanners measure fine details and capture freeform shapes to quickly generate highly accurate point clouds. 3D laser scanning is ideally suited to the measurement and inspection of contoured surfaces and complex geometries which require massive amounts of data for their accurate description; where traditional measurement methods or a touch probe would be impractical.

#### WHY USE 3D LASER SCANNING?

- Can be used on simple to complex projects
- Is the most effective measurement solution in the Architectural market
- Provides a solution for long lead times & inaccuracy
- Helps to identify and offer solutions to serious construction inconsistencies
- Resolves issues such as minimum system depth requirements early on
- Identifies out-of-plumb conditions that can be quantified and established on installation drawings
- Can be used by Engineers as 'built conditions' in areas where access can be unsafe or impossible
- Greatly reduces field fabrication
- Data can be saved for future use without several on-site trips

#### **Project Name:**

## **Gaylord National Riverview Ballroom**

Architect:

Blur Workshop

Completion Date: 2017

Location:

National Harbor, Maryland

Arched soffits created challenges in both fabrication and installation. The 3D Laser Scan provided great information to allow CEI Materials to accurately design the panels for the difficult fascia/soffit panels.



### **Our Products**

At CEI, we will meet or exceed your construction or performance requirements.

#### Metal Composite Materials (MCM)

The flexibility of our Metal Composite Materials allow CEI to exceed the Architect's design intent and exterior cladding requirements while providing a high-quality, smooth, rigid and attractive finish.

By utilizing CEI's Rainscreens and Route & Return Wet Joint Systems, clients are able to broaden architectural horizons through appearance, performance, fire resistance, sustainability and design flexibility.

#### **High Pressure Laminate (HPL)**

High Pressure Laminate Panels are produced by saturating several layers of kraft paper with phenolic resin that are then compressed into a single sheet using high pressure and temperature.

HPL is a high-quality durable exterior wall cladding product designed to withstand the elements. This unique rainscreen façade features a double hardened acrylic polyurethane resin, which creates a powerful weather protective coating.







## Project Name: **The Linx**

Architect:

Spagnolo, Gisness & Associates

**Products Used:** 

MCM Panels (R4000), Perforated Plate Panels

Location:

Watertown, Massachusetts

#### **Corian®**

Corian® panels are a lightweight, long-lasting and durable blend of natural minerals and acrylic polymers. These panels have a three-dimensional formability and are weather resistant. Panel colors run through the entire thickness so edges are the same color as the sheet, and are offered in a variety of different options.

#### **Aluminum Plate**

Plate Panels are fabricated out of aluminum. CEI offers a variety of solid aluminum plate and perforated panel systems. This material can be formed into limitless profile options and is available in numerous colors and finishes. Plate panels can be used in conjunction with any of CEI's attachment systems.

#### **Column Covers**

Our column covers can be formed to virtually any shape and are available in a number of different joint configurations and are available in either MCM or Aluminum Plate.

#### **Pre-Engineered Modular Structures**

CEI produces a variety of pre-engineered modular structures and possesses the capability to deliver on a large scale. With the use of prefabrication, preassembly and controlled fabrication techniques, CEI is able to greatly improve efficiency and productivity.

The advantages of Modular Construction are reduced site pressure, quality control and stronger, more durable structures which can fulfill the requirements of every design.

# **Our Systems**

CEI has three systems for the design and installation of MCM: R3000, R4000, and W5000 series. For Corian® and HPL, CEI offers the E1000 series and Concealed Joints, the C2000 series. For Column Covers, CEI offers the CL100, CL200 and the CL300 series.



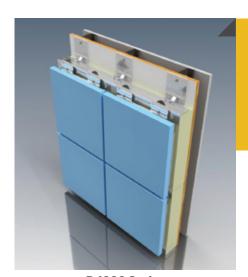
R3000 Series

#### **Pressure Equalized Rainscreen System**

CEI Materials' R3000 Pressure Equalized Rainscreen System is tested to remove the driving forces of water penetration and equalizes the air-pressure on the external and internal sides of this compartmentalized Panel System.

#### **System Characteristics:**

- Joint Width of 1/2 & 3/4"
- Independent 4mm MCM Spline Joint
- Tested to ASTM 283, ASTM 330, ASTM 331 and AAMA 508-07
- NFPA 285 Compliant



R4000 Series

#### **Drained Rear-Ventilated Rainscreen System**

CEI Materials' Performance Tested & Approved R4000 Drained/ Rear-Ventilated Rainscreen Panel Systems offers rainscreen technology with varying joint widths as well as color versatility.

#### **System Characteristics:**

- Joint Width of 1/2 & 3/4"
- Independent 4mm MCM Spline Joint
- Most economical Rainscreen System
- Tested to ASTM 283, ASTM 330, ASTM 331 and AAMA 509-09
- NFPA 285 Compliant



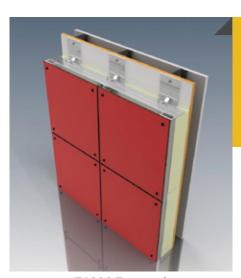
W5000 Series

#### **Route and Return Silicone Joint System**

CEI Materials' W5000 Route & Return Silicone Joint Panel Systems offer a weather tight economical assembly utilizing a closed cell backer rod, structural silicone joint and hidden fasteners. The non-progressive design offers installation versatility.

#### **System Characteristics:**

- Joint Width of 1/2 & 5/8"
- Non Progressive Individual Removable Panels
- Most Economical System
- Tested to ASTM 283, ASTM 330 and ASTM 331
- NFPA 285 Compliant



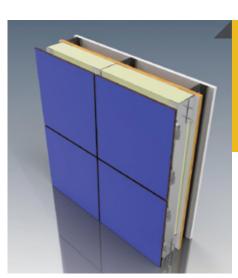
E1000 Exposed

#### **E1000 Exposed Fastener Attachment System**

CEI Materials' E1000 Exposed Fastener Attachment Systems are cost effective yet still offer an architecturally attractive look.

#### **System Characteristics:**

- Drained Back-Ventilated Rainscreen
- 1" System Depth
- Visible Rivet Fixing
- High Pull-Out Values and Ease of Installation



**C2000 Concealed** 

#### **C2000 Concealed Fastener Attachment System**

CEI Materials' C2000 Concealed Fastener Attachment Systems offer installation flexibility by using a concealed adjustable bracket for a smooth finish with precision joints.

#### **System Characteristics:**

- Drained Back-Ventilated Rainscreen
- 1 <sup>1/2</sup>" System Depth
- The Back of Each Panel is Pre-Drilled Using Undercut Drill Bit to Receive the Hanger Clip and Expanding Bolt Anchor



**CL100 Series** 

#### **CL100**

CEI Materials' CL100 Wet Joint is ideal for columns requiring a horizontal reveal. This column type looks great with our W5000 panel system.

#### **System Characteristics:**

- Route & Return Caulked Joint
- ½" Nominal Joint Width
- Most Economical Column Cover
- Great For Horizontal Joints



**CL200 Series** 

#### **CL200**

CEI Materials' CL200 Hairline Joint is a great way to create a seamless look on your columns.

#### **System Characteristics:**

- Hairline Reveal
- Horizontal Reveal Available
- Easy To Install



**CL300 Series** 

#### **CL300**

CEI Materials' CL300 Dry Joint has a clean feel and looks great with our R3000 or R4000 panel systems.

#### **System Characteristics:**

- Rear-Ventilated Rainscreen
- 3 Piece Spline Joint
- ½" and ¾" Reveals Available



















# Corporate Branding







CEI provides services to many companies looking for Corporate Identity services. We have completed hundreds of projects representing major brands. CEI also possesses the capability to produce the façade and the corresponding entry element for several companies' Corporate Identity Programs.

Our method is simple; CEI certifies that the design intent is preserved by our compliance to the requirements of the guide specifications as stipulated by the client. This distinction was acquired through effective communications and by producing designs that adhere to or exceed the metal panel façade/cladding specification standards for each and every CID program.

CEI possesses the capability of producing several brands of Modular Entry Elements at a large volume for aggressive CID roll outs. With a proven, repeatable process for the prefabrication, preassembly, modularization and installation of Modular components, CEI is highly proficient. We welcome the opportunity to assist with your next Modular Entry Element.

#### Project Name:

#### **Chelsea Chevrolet**

Architect: Studio Design - ST

Completion Date: 2014

Location: Chelsea, Michigan



# Sustainability

We design, fabricate and install materials made with recycled content to help you achieve your environmentally responsible objectives esthetically and within budget.



# LEED® Green Building Rating

The LEED® (Leadership in Energy and Environmental Design) Green Building Rating System™ is the nationally accepted benchmark for the design, construction, and operation of high performance green buildings.

The goal is to give "building owners and operators the tools they need to have an immediate and measurable impact on their buildings' performance." LEED identifies a building's performance in the categories of Sustainability, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Environmental Quality and Innovation in Design. CEI can help in your effort to build it green!

#### **CEI LEED PROJECTS:**

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Holyoke Public Library Holyoke, MA

**The Blairs**Silver Spring, MD

The Linx Watertown, MA

Belvoir Corporate Campus Springfield, MA

> Fallsgrove Plaza Rockville, MA

ICC Cougarplex East Peoria, IL

Kaplan Hall Newburgh, NY

Maguire Automotive Ithaca, NY

Memminger Elementary School Charleston, SC

> Needham Residence Inn Needham, MA

> > PNC Bank Detroit, MI

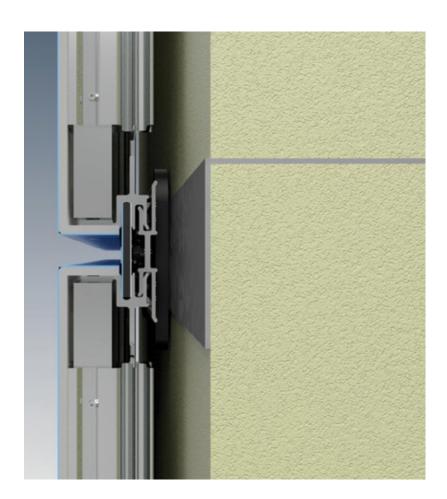
Sandvik Coromant Headquarters Fair Lawn, NJ

> Superior Toyota Merriam, KS

Westchester CC Valhalla, NY



Green designs provide financial benefits that conventional designs do not. There is increased energy efficiency with green buildings, decreased costs, and green buildings attribute to enhanced occupant productivity and health.



Building materials used to construct our products, such as Reynobond®'s EcoClean™, can help you achieve LEED (Leadership in Energy and Environmental Design) credits and certification. CEI also recognizes the critical importance of the building energy performance. ASHRAE 90.1 is driving the requirement of continuous insulation outbound of the exterior sheathing.



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