MATERIALS & SYSTEMS
ABOUT SOBOTEC

Adding Structure to Vision

Sobotec is a North American leader in the design, manufacturing and installation of architectural wall panel systems. Providing concept to completion services, Sobotec is a fully integrated, single source responsibility company that is able to design, manage, manufacture and install projects of any size.

For more than 30 years, we have been relied upon for our custom engineered systems, our impressive facades and our ability to solve the most complex design challenges. With Sobotec, you have peace of mind knowing that you will be receiving the highest-quality products and services from the initial design budget to the final installation.

Sobotec’s other specialty divisions include:
- Corporate Identity Development
- Sobotec Advanced Manufacturing

For more information please visit Sobotec.com
MATERIALS & SYSTEMS

A North American Leader in Architectural Wall Panel Systems

Sobotec has been a pioneer and leader in the architectural wall panel industry for over 30 years. Sobotec is credited for being the first company to develop an engineered Rainscreen System for metal composites. This innovation revolutionized the North American architectural and building industries. Since then, Sobotec systems have become some of the most widely used, replicated and specified panel systems in North America.

Sobotec systems are based on the Rainscreen Principle. All Sobotec systems can be modified or customized.

They meet the highest standards of:

- Engineering
- Performance
- Quality
- Reliability
- Testing
- Safety

The use of proven and tested world-class materials is the hallmark of Sobotec systems.

Benefits and options include:

- Materials and Surfaces
- Colors and Finishes
- Patterns and Designs
- Testing & Performance
- Custom Graphics
- Perforations
- Formability, Curves & Shapes
- Custom Features
- Integration (Lighting)

Visit Sobotec.com/products to learn more.
Superior Aesthetics with Ultimate Formability

Metal composites provide every project with the superior aesthetics and expression of authentic metal panels. Aside from being lightweight with adaptable finishing options, MCM provides the ability to form shapes, curves and modules with a full spectrum of vivid colors including woodgrains, natural metals, textures and fluorescent finishes.

Sobotec predominantly uses Alucobond® for its MCM panel systems. Developed in 1969, Alucobond® is the world’s original metal composite product and has the reputation of being the most trusted and superior MCM product on the market. It has been time-and-laboratory tested to meet stringent building code requirements.

Sobotec revolutionized the architectural wall panel industry by developing the first Pressure Equalized Rainscreen System for metal composites. This innovation led to the expanded use of MCM throughout North America. Sobotec is one of only a handful of North American companies certified by the Metal Construction Association (MCA) as a Certified Premium MCM Fabricator.
SL-1000
Rout & Return Caulked System

System Information
The SL-1000 system is used in applications where virtually all water infiltration is eliminated in the vented cavity. An air barrier is required behind panels under these conditions. In other applications, the SL-1000 can be used as a fully sealed system which relies on the face sealant to act as the primary weather barrier.

This system is a traditional system in applications where the seal cannot be guaranteed by membranes and is still used on simple to complex applications. With the exception of the panel joint treatment, this system is technically equal to the SL-2000 and has been structurally tested to the same stringent criteria.

Special Features
- Can be designed as a fully Pressure Equalized Rainscreen System
- Can be designed as a fully face sealed system
- Sealed panels at the joint assist in keeping water out of air cavity

System Characteristics & Testing

<table>
<thead>
<tr>
<th>Material</th>
<th>Metal Composite Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Type</td>
<td>Caulked Joint</td>
</tr>
<tr>
<td>Standard Joint Size</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Testing</td>
<td>Tested to AAMA 501 Standard, AAMA 501.1, AAMA 501.4, ASTM E283-04, ASTM E331-00, ASTM E330-02</td>
</tr>
<tr>
<td>Wall Design</td>
<td>Pressure Equalized Rainscreen System; Fully Face Sealed</td>
</tr>
</tbody>
</table>

SL-2000
Dry Joint Pressure Equalized Rainscreen (PER) System

System Information
The SL-2000 is a low-maintenance and easily customizable PER system. This system features a double line of defense against water penetration. First, is a pressure equalizing air cavity which mitigates the differential forces that attempt to draw water into a structure. Second, is a fully protected weather barrier that blocks any residual moisture. The MCM joint filler allows variance in both color and joint size. The SL-2000 system has been continuously upgraded and tested as per the changing North American building code requirements. It is also tested to the American Architectural Manufacturers Association (AAMA) 508 standard for PER systems. The test report is available to design professionals through Sobotec’s engineering department.

Special Features
- AAMA 508 Tested: Pressure Equalized Rainscreen System
- Ventilated cavity allows wall to breathe
- Joint filler allows for variable color and reveal size
- Low-maintenance, flexible panel design
- Concealed air barrier membrane provides improved weather resistance
- Able to modify and customize for highly complex projects

System Characteristics & Testing

<table>
<thead>
<tr>
<th>Material</th>
<th>Metal Composite Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Type</td>
<td>Dry</td>
</tr>
<tr>
<td>Standard Joint Size</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Testing</td>
<td>Tested to AAMA 508 Standard, AAMA 501.1, ASTM E331-00, ASTM E330-02, ASTM E283-04</td>
</tr>
<tr>
<td>Wall Design</td>
<td>Pressure Equalized Rainscreen System</td>
</tr>
</tbody>
</table>
**SL-3000**  
Dry Joint Gasketed System

**System Information**
The SL-3000 is a high performance, dry-joint system utilizing an extruded horizontal and vertical guttering system. The joint seal is accomplished by the use of neoprene gaskets placed within the perimeter extrusions. Perimeter extrusions reinforce and encapsulate panel returns, eliminating exposed cut edges. The standard reveal color is black with optional colors available. To accommodate various accent expressions, vertical and horizontal extrusions are available in various sizes or can be extruded to suit various custom designs. The SL-3000 is tested to the American Architectural Manufacturers Association (AAMA) 501 standard, Methods of Test for Exterior Walls.

**Special Features**
- Secondary gutter ensures water tight performance
- Encapsulated panel edge
- Air barrier membrane provides improved weather resistance
- Low maintenance

**System Characteristics & Testing**

<table>
<thead>
<tr>
<th>Material</th>
<th>Metal Composite Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Type</td>
<td>Extruded, Painted and Gasketed Aluminum</td>
</tr>
<tr>
<td>Standard Joint Size</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>Testing</td>
<td>Tested to AAMA 501 Standard, AAMA 501.1, AAMA 501.4, ASTM E336, ASTM E391, ASTM E283</td>
</tr>
<tr>
<td>Wall Design</td>
<td>Dry Sealed System, Can be designed as a Pressure Equalized Rainscreen System</td>
</tr>
</tbody>
</table>

---

**SL-4000**  
Dry Joint Snap-In Reveal System

**System Information**
The SL-4000 is a unique Pressure Equalized Rainscreen System which allows individual panels to be easily removed and replaced. The aluminum extruded two-part snap-in reveal allows for expansion and contraction at each individual panel.

To date, the SL-4000 system is known for having one of the largest applications of Alucobond® material in North America. Originally developed for Casino Windsor (now known as Caesar’s Casino Windsor), this project had a panel area of 375,000 sq. ft. Its exclusive characteristics and widespread recognition made this system another one of Sobotec’s popular, engineered-performance designs.

**Special Features**
- Panels are able to be individually removed and replaced without disturbing adjacent panels
- Custom-designed, high-performance system
- Utilizes a unique two-part snap-in extruded reveal

**System Characteristics & Testing**

<table>
<thead>
<tr>
<th>Material</th>
<th>Metal Composite Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Type</td>
<td>Non-progressive, individually removable panels</td>
</tr>
<tr>
<td>Standard Joint Size</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>Testing</td>
<td>Full scale wall test at Construction Research Laboratory Inc., Miami, Florida</td>
</tr>
<tr>
<td>Wall Design</td>
<td>Pressure Equalized Rainscreen System</td>
</tr>
</tbody>
</table>

---
ALUMINUM PLATE

Dependable Panel Material with Superior Durability

Made from solid aluminum, this panel material is dependable and has superior durability. Available in numerous colors and finishes, aluminum plate has fabrication options that are almost endless. Whether the project is small or monumental, aluminum plate is a great choice.
The SL-1000P system incorporates solid metal materials for panel surfaces. It utilizes full-length interconnecting perimeter extrusions which reinforce the panel flanges and provides self-alignment of the panels. The panel joints are sealed using silicone or urethane-based sealants. Finish and face thickness will vary depending on the architectural and structural requirements. From simple to complex designs, this system provides a long-lasting, maintenance free façade.

Special Features
- Can be designed as a fully Pressure Equalized Rainscreen System
- Can be designed as a fully face sealed system
- Sealed panels at the joint assist in keeping water out of air cavity

System Information

The SL-1000P system is another low-maintenance PER system with numerous design and fabrication options. Similar to the SL-1000P, this system incorporates solid metal materials at the panel joints. The wall attachment, air/vapor barrier seals and joint treatment are to the Sobotec SL-2000 standards, yet uses solid aluminum plate material. The joint filler for this system can also vary in both color and joint size. This system meets the same testing criteria of the American Architectural Manufacturers Association (AAMA) 508 standard for PER systems. The SL-2000P system can also be used with natural metals such as zinc, copper and stainless steel. Yet aluminum plate is most often used when requiring a painted surface.

Special Features
- Pressure Equalized Rainscreen System
- Ventilated cavity allows wall to breathe
- Joint filler allows for variable color and reveal size
- Low-maintenance, flexible panel design
- Concealed air barrier membrane provides improved weather resistance

System Characteristics & Testing

<table>
<thead>
<tr>
<th>Material</th>
<th>1/8” (3mm) Aluminum Plate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Type</td>
<td>Caulked Joint</td>
</tr>
<tr>
<td>Standard Joint Size</td>
<td>1/2”</td>
</tr>
<tr>
<td>Testing</td>
<td>ASTM E283-04, ASTM E331-00, ASTM E330-02</td>
</tr>
<tr>
<td>Wall Design</td>
<td>Pressure Equalized Rainscreen System, Fully Face Sealed</td>
</tr>
</tbody>
</table>

For CAD Details & Specifications, visit sobotec.com
SL-5000P
Dry Joint Pressure Equalized Rainscreen (PER) System

System Information
This heavy gauge, solid plate PER system is used on monumental projects where a floating, exposed panel edge appearance is desired. The attachment system is custom engineered using welded studs to minimize heat transfer to the face of the panel.

The panel joint is typically recessed and finished in a dark color to create a shadow effect. Alternatively, the joint size, finish and configuration can be modified to suit project specifications. The SL-5000P system has been fully tested to satisfy all code requirements in addition to full scale testing of individual panels to establish stud behavior under various loads.

Special Features
- Pressure Equalized Rainscreen System
- Floating appearance with an exposed painted panel edge
- Low-maintenance, flexible panel design

System Characteristics & Testing

<table>
<thead>
<tr>
<th>Material</th>
<th>3/16” (5mm) Aluminum Plate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Type</td>
<td>Dry</td>
</tr>
<tr>
<td>Standard Joint Size</td>
<td>1/2”</td>
</tr>
<tr>
<td>Testing</td>
<td>Full Scale Wall Test at ATI, York, PA; Panel Load Tests at ITS, Toronto, ON</td>
</tr>
<tr>
<td>Wall Design</td>
<td>Pressure Equalized Rainscreen System</td>
</tr>
</tbody>
</table>

For CAD Details & Specifications, visit sobotec.com

DO YOU REQUIRE A CUSTOM ENGINEERED PANEL SYSTEM?

All Sobotec Systems can be Modified or Customized.

We have collaborated with numerous architects and firms to provide them with design-assistance and custom solutions to address their various design challenges.

Contact us today to learn how we can assist with your custom design or specific project requirement.
SELECTED PROJECTS

1. Institute for Human Performance, Syracuse NY. Photo Credit: Robert Menzurage courtesy of SUNY Upstate Medical University
2. Nassau Coliseum, East Garden City NY. Photo Credit: ©Jamey Price Photography courtesy of 3A Composites USA
3. Indianapolis International Airport, Indianapolis IN. Photo courtesy of Indianapolis International Airport
4. Michigan State University Bio-Engineering Facility, East Lansing, MI
5. Indianapolis Fire Station #7, Indianapolis, IN.
6. Indwell’s Rudy Holst Commons, Hamilton, ON.
7. Lincoln Park Retail Center, Chicago, IL. Photo Credit: Paul Biasco courtesy of 3A Composites USA
8. 12 Degrees Condo, Toronto ON. Photo Credit: CORE Architects
9. Community Hospital & Wellness Center, Bryan OH. Photo Credit: Paul J. Zeinert courtesy of CHWC Bryan Hospital

View our latest projects by visiting Sobotec.com
HIGH PRESSURE LAMINATE (HPL)

Distinctive Panels that Add Character to any Building

For both interior and exterior use, HPL is a dependable and distinctive panel material that is able to withstand the elements. HPL is an extremely durable material with various surface options including matte, satin, high-gloss, authentic wood grain, textured hexagon and more. Available in large panel sizes, HPL has a full color palette and can even have graphic design images or patterns applied as part of the panel itself, making HPL the perfect choice for inspiring designs.

When considering a project using HPL or phenolic composite material, Sobotec chooses to use FunderMax®. FunderMax® is the leading worldwide manufacturer of HPL. It produces one of the most versatile products with numerous interior and exterior applications. With its endless design options and custom possibilities, this product allows you to add character to any building.
The FSL-100 is a Drained and Back Ventilated Rainscreen System. This system allows for HPL panels to be easily installed in a wide variety of sizes and patterns. HPL panels have a recommended minimum thickness of 5/16" (8mm) and may be fixed onto an aluminum sub-frame using stainless-steel mill-finish or powder coated screws which are available in a wide range of colors.

Special Features
- Drained and Back Ventilated Rainscreen System
- Floating, exposed panel edge appearance
- Color matched fasteners
- Low-maintenance, flexible panel design
- Numerous pattern and design options

System Characteristics & Testing

<table>
<thead>
<tr>
<th>Material</th>
<th>FunderMax Minimum Thickness 5/16&quot; (8mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Type</td>
<td>Open</td>
</tr>
<tr>
<td>Standard Joint Size</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Wall Design</td>
<td>Drained and Back Ventilated Rainscreen System</td>
</tr>
<tr>
<td>Design Factor</td>
<td>Color Matched Fasteners</td>
</tr>
</tbody>
</table>

System Information

The FSL-200 system offers a great deal of flexibility when installing HPL panels. The use of adjustable brackets allows for precise joints and an optimal façade grid to create unique projects that truly leave a lasting impression.

This HPL system has a recommended minimum thickness of 3/8" (10mm) and may be fixed invisibly on a metal sub-frame comprised of horizontal rails and hanging aluminum brackets fixed to the back of the panel. This system is also a Drained and Back Ventilated Rainscreen System.

Special Features
- Hidden fasteners
- Drained and Back Ventilated Rainscreen System
- Floating, exposed panel edge appearance
- Low-maintenance, flexible panel design
- Numerous pattern and design options

System Characteristics & Testing

<table>
<thead>
<tr>
<th>Material</th>
<th>FunderMax Minimum Thickness 3/8&quot; (10mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Type</td>
<td>Open</td>
</tr>
<tr>
<td>Standard Joint Size</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Wall Design</td>
<td>Drained and Back Ventilated Rainscreen System</td>
</tr>
<tr>
<td>Design Factor</td>
<td>Eliminates All Exposed-Fasteners</td>
</tr>
</tbody>
</table>

For CAD Details & Specifications, visit sobotec.com
NATURAL METALS

A Timeless Material that Enhances and Evolves

Enhance your project with the timeless beauty and lustre of natural metals such as zinc, copper or stainless steel. Available in numerous finishes, these materials have the capability to evolve and add unique character to building facades over time.
SurFlex™
Single-Skin Modular Panel System

System Information
SurFlex™ is a pressure equalized, single-skin modular panel system that has been tested to the American Architectural Manufacturers Association (AAMA) 508 standard for Pressure Equalized Rainscreen (PER) Systems. This dry joint system uses formed panels with interlocking joints. SurFlex™ does not require clips or extrusions and can be easily installed directly onto building substrates. Manufactured using an automated production process, SurFlex™ is one of the most economical and cost-effective panel systems on the market. For either a subtle or dramatic effect, SurFlex™ has numerous design and pattern possibilities. Aesthetic options include: Standard, Perforated, 3-Dimensional/Staggered or Tapered.

Special Features
- AAMA 508 Tested: Pressure Equalized Rainscreen System
- Most economical panel system on the market
- Numerous design, aesthetic and pattern possibilities
- Interlocking joints for fast and easy installation
- No extrusions or clips required

System Characteristics & Testing

<table>
<thead>
<tr>
<th>Material</th>
<th>Aluminum, Zinc, Copper, Stainless Steel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Type</td>
<td>Dry</td>
</tr>
<tr>
<td>Standard Joint Size</td>
<td>1/2” Nominal Standard Up To 2” Depending On Material</td>
</tr>
<tr>
<td>Testing</td>
<td>Tested to AAMA 508 Standard, ASTM E330, ASTM E283, ASTM E331</td>
</tr>
<tr>
<td>Wall Design</td>
<td>Pressure Equalized Rainscreen System</td>
</tr>
</tbody>
</table>

SurFlex™ Options

3D/Staggered
Enhance the look and feel of any façade with the bold three-dimensional design of staggered panels with varied depths and sizes.

Tapered
Create a multi-dimensional textured effect with an array of protruding panels surfaces, sloped at varying angles, directions and depths.

Perforated
Add an unforgettable perforated image, abstract design or pattern to create a unique look on any façade.

For CAD Details & Specifications, visit sobotec.com
Take Your Design to the Next Level

Sobotec specializes in custom engineered panel systems. For over 30 years our engineering and design teams have translated conceptual architectural ideas into high-performance panel systems. Hence our tagline, "Adding Structure to Vision".

Our approach is collaborative as each system is customized and engineered based on the specific requirements of your project. Sobotec’s custom engineered panel systems allow you to create one of a kind façades, taking your project to the next level.
PERFORATED SYSTEMS

Create an Unmatched Visual Effect

Whether it is a unique pattern, a perforated image or an abstract panel design, perforated panels are a great addition to any project. Using a range of sizes, perforations create an unmatched visual effect.

Sobotec perforated systems can be used as part of a standard or custom designed panel system.