

FASSADE™

INSULATED WALL SYSTEM

Integrating superior thermal efficiency with unlimited design potential.



INNOVATIVE. ADAPTABLE. ENERGY EFFICIENT.

CONFORMITY WITHOUT LIMITS

Vicwest Building Products perform economically, practically, and creatively without compromise.

The opportunity for expanded potential in design and construction is the leading reason why architects, engineers and contractors specify Vicwest to meet both their vision and building compliance.

Whether your building expresses a classic story, or inspires a modern vision, Vicwest's wall systems offer the opportunity to pursue exciting design concepts with a versatile palette of colors, shapes and finishes, all while meeting leading requirements in cost and code.

With service and manufacturing facilities in Canada and the United States providing expert technical support and field service, you can be confident that, regardless of location, your project will be covered by the Vicwest umbrella. Vicwest is the leader in building envelope systems, providing leading system warranties, comprehensive service, and ultimate reliability.



FEATURE PROJECT

Canada Games Centre in Halifax

LEED Certified SILVER with Vicwest's FASSADE™ Insulated Metal Wall System

The architects envisioned a contrast between rippling corrugated metal panels and the smooth glass of large windows, and achieved this by pairing FASSADE with Vicwest's 7/8" corrugated cladding.

Prior to the Olympic games, many of Canada's athletes get their first high-level competition experience at the Canada Games. And for many towns and cities, hosting the event includes the benefit of the construction of new facilities. Such was the case with the Canada Games Centre in Halifax, Nova Scotia, which was designed by DSRA Envision Architecture for the 2011 Games. The 176,000 square foot facility houses an eight lane training pool, a leisure pool, a field house with three basketball courts, a six-lane running track and a fitness center, as well as cafes and social spaces. The Centre was designed to a LEED Silver standard and uses 200 solar thermal collectors for heating water, and 36 solar duct modules for pre-heating intake air. Heather MacAulay, LEED AP, CanSIA Board of Directors, described the project as "forward thinking," and said "The entire facility is designed with an emphasis on energy efficiency and to promote a healthy indoor environment."

Although traditional sandwich walls were originally specified, Vicwest's FASSADE Insulated Metal Wall System was selected for the exterior walls after construction began. With approaching cold temperatures, EllisDon chose FASSADE to seal the building while taking advantage of the superior thermal efficiency IMP offers. This solution demonstrated FASSADE's adaptability towards a pre-engineered building environment, while additionally lowering building energy costs and reducing the overall carbon footprint.

FASSADE also decreased installation time and lowered project labor costs. FASSADE's high-performance core functions as an alternative to conventional air and moisture barrier systems, allowing buildings to be quickly enclosed to maximize air and water tightness, while enabling the design to support horizontal and vertical cladding systems. Vicwest's system is engineered to comply with the stringent R-value and energy bridging requirements of ASHRAE 90.1 and Ontario SB-10, which allowed the Canada Games Centre to meet its ambitious energy requirements.

The architects envisioned a contrast between rippling corrugated metal panels and the smooth glass of large windows, and achieved this by pairing FASSADE with Vicwest's 7/8" corrugated cladding.

By choosing FASSADE, the facility's designers have ensured a lower municipal operating budget by incorporating sustainable energy systems, and have provided visitors with a comfortable, attractive and healthy facility. While the Canada Games Centre's initial purpose was for a particular event, the design and construction has allowed it to serve as an important recreational facility.



Project Details

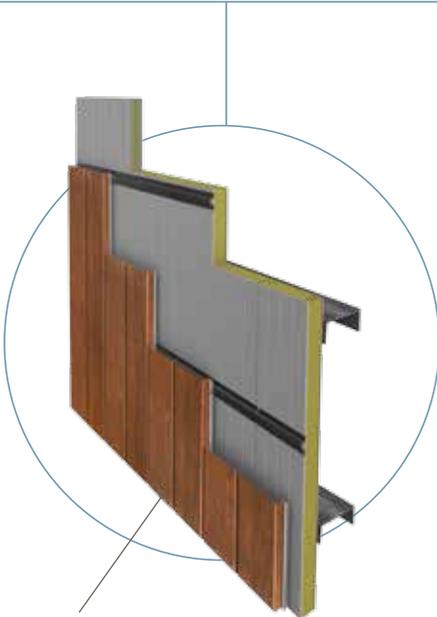
Owner:	Halifax Regional Municipality
Architectural firm:	DSRA Envision Architecture
Engineering firm:	BMR Structural Engineering
General contractor:	EllisDon Corporation
Other:	LEED certified SILVER (link CaGBC)

FASSADE™ Insulated Wall System

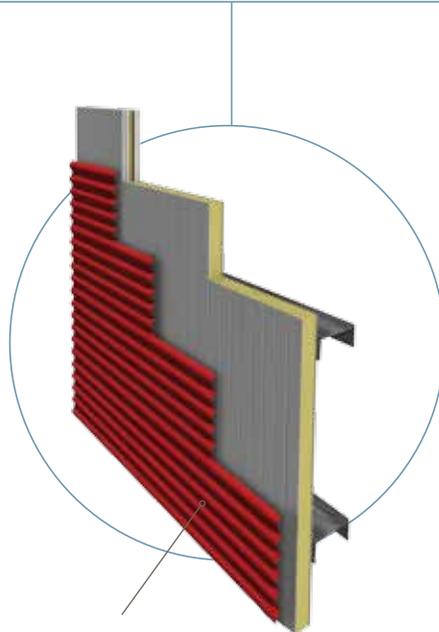
Integrating superior thermal efficiency with unlimited design potential.



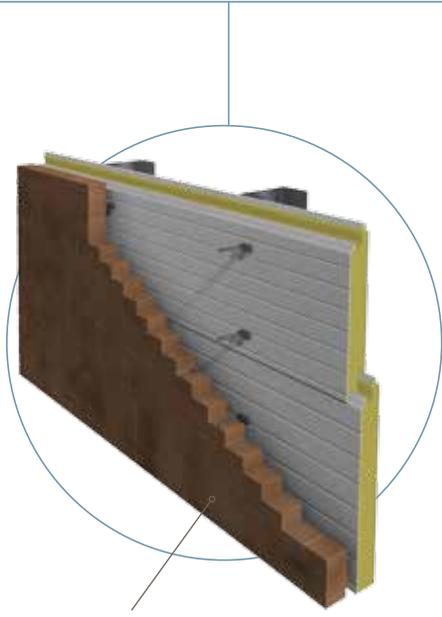
The FASSADE Insulated Wall System incorporates an easy-to-install, single component insulated panel core with the ability to customize your building's exterior with any of Vicwest's wide and trusted range of cladding options – from the clean lines of our AD 300 profile to the myriad of finishes of our custom fabricated Architectural Panel systems.



Shown with Vicwest AD300R Architectural Steel Panel in Expressence™ Dark Cedar Painted Finish



Shown with 7/8" Corrugated



Shown with Brick

As a design professional, you strive for creations that evoke a reaction, make a statement and express confidence. FASSADE was designed for you. FASSADE Insulated Wall System has been engineered to achieve your architectural vision, while fully complying with building codes and a new era of stringent energy requirements.

An economical alternative to conventional barrier systems, FASSADE incorporates an easy-to-install, single-component insulated panel core that supports Vicwest's extensive range of cladding and finishing options. Available only from Vicwest Building Products, FASSADE is supported by a 5-year system warranty, making it the definitive solution for your IMP and cladding demands.

Vicwest's FASSADE Insulated Wall System offers an unequalled opportunity to express your creative vision with the widest available range of styles, finishes and colors while conforming to building codes and standards.

Find out how Vicwest is addressing the challenges you face designing in the 21st Century while adapting to rapidly evolving energy standards. Go to vicwest.com/FASSADE and join the conversation with Architect Focus Groups Canada.

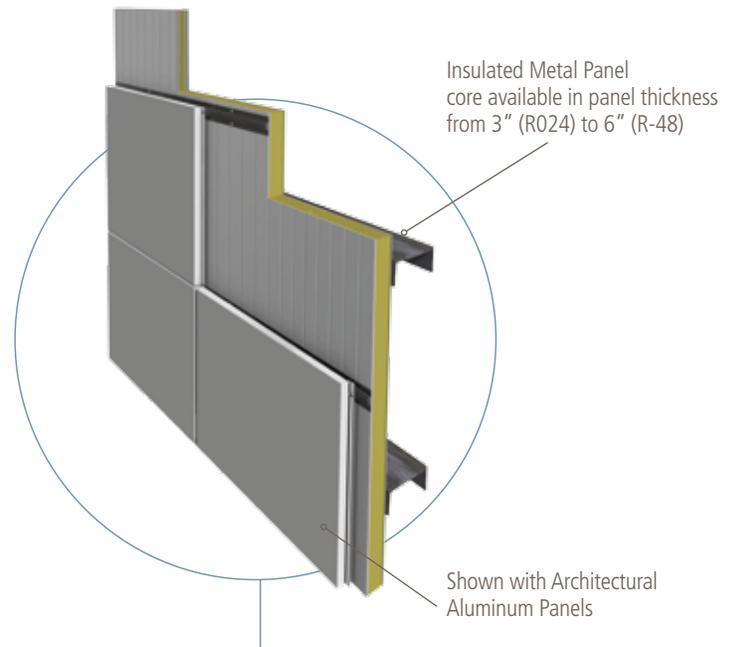
FASSADE INSULATED WALL SYSTEM

Experience creativity without boundaries with Vicwest's wall systems: Flexible solutions to the rigidity of code.



Uses and Applications:

The FASSADE Insulated Wall System is suited as a wall for any type of architectural, commercial or industrial applications and in both new and retrofit construction.



SPECIFICATIONS

FASSADE™ Insulated Wall System Core:

- **Exterior & Interior Profile:** DM40 (Mesa) insulated panel
- **Insulation:** CFC-free and no ODP foamed-in-place polyisocyanurate foam 2.2 to 2.5 pcf density
- **Panel Thickness:** 3" minimum
- **Insulating Values:** R-Value*: 24 minimum
U-Factor**: 0.05 Btu/hr-ft²-F
- **Panel Width:** 40"
- **Panel Length:** 8' minimum to 50' maximum insulated metal panels. Consult your sales representative for other available lengths and for cladding options.
- **Metal Facings:** 26ga galvanized steel minimum
- **Panel Joint:** Offset tongue and groove with concealed fastener to minimize thermal bridging

* R-Value tested in accordance with ASTM C518/C1363 at 40°F mean temperature, adjusted for a windspeed of 15 mph.

** U-Factor tested in accordance with ASTM C1363, Standard Test Method for Thermal Performance of Building Materials and Envelope Assemblies by Means of a Hot Box Apparatus.

Wall and Roof Panels:

- **R-Value*** (per inch)
7.1 @ mean temperature of 75°F
7.9 @ mean temperature of 40°F
- **Thicknesses** (per inch)
Wall System Standards:
Mesa: 2, 2.5, 3, 4, 5, 6
Striated: 2, 2.5, 3, 4
Flat: 2, 2.5, 3
Heavy Embossed & Adobe Texture™: 2, 2.5, 3, 4
Roof and Roof Deck Systems Standards:
Standing Seam: 3.25, 4, 5, 6
HR Series: 2.5, 4, 5, 6
Roof Deck: 2.5, 4, 5, 6
- **Panel Width:** 40" standard. Flat (FL) and Striated (ST) panels available in 36" width.
- **Panel Length:** 8' minimum to 50' maximum based on standard 48' flatbed trailer length
Consult your sales rep for other available lengths
- **Insulation:** CFC-free foamed-in-place Polyisocyanurate foam @ 2.2 to 2.5 pcf density
- **Metal Facings:** 26ga standard galvanized or galvalume steel. (22ga, 24ga available. Consult your sales rep for availability)
- **Coatings:** Standard PVDF & SMP (other finishes may be available)
- **Joint & Fastening:** **Wall & Standing Seam Roof Panels:** Off-set tongue and groove with concealed fastener
HR Series Roof Panels: Overlapping with through fastening at the standing rib

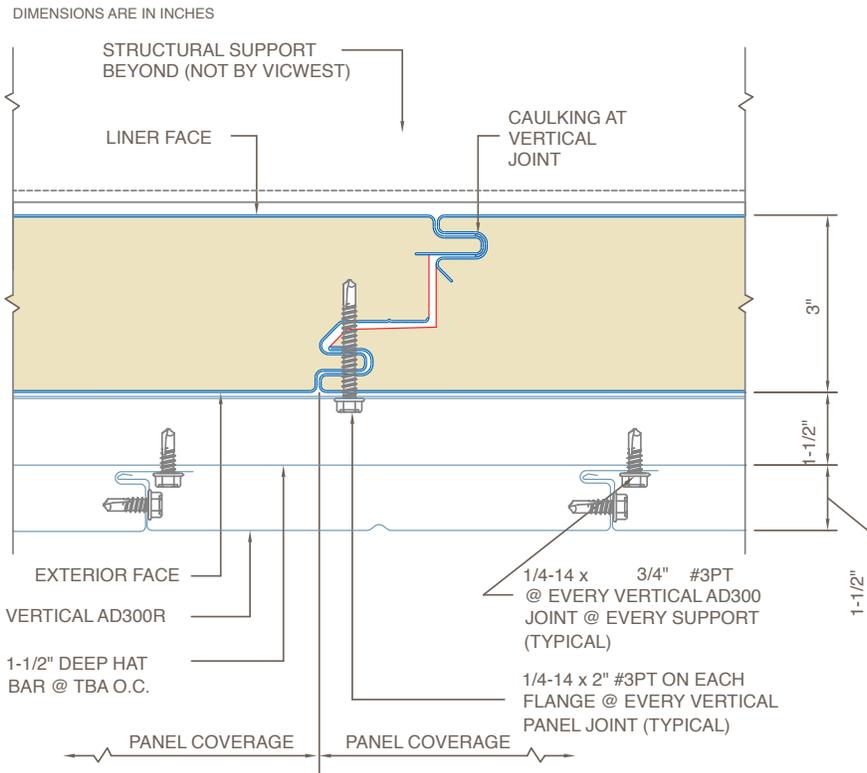
* R-Values shown is for general use only. They do not reflect system or specific end-use insulation values. Please consult with your Vicwest sales rep for project specific analysis.



Features & Benefits:

- Satisfies building code R-Value requirements with minimum panel thickness
- Eliminates thermal bridging and provides the structure to support diverse horizontal or vertical cladding systems
- More efficient than multi-piece field assemblies, saves installation time and labour costs
- Faster building enclosure to maximize air and water tightness
- Engineered as a single package from a single trusted supplier – backed by a reputable single system warranty
- Perfect for any type of architectural, commercial or industrial application in both new and retrofit construction

Insulated Metal Panel FASSADE Vertical Cladding Application Vertical Joint Detail



**SPACING, GAUGE, AND FASTENING PATTERN ARE DEPENDENT ON JOB SPECIFIC LOADING CRITERIA

NOTE: DETAIL MUST BE REVIEWED AND MODIFIED AS REQUIRED TO SUIT INDIVIDUAL PROJECT CONDITION.

Sustainable Characteristics

- Recycled content:**
 The steel facings used in our panels contain a minimum total recycled content of 30%: (post-consumer approx. 23% and pre-consumer approx. 7.3%)
- Recyclability:**
 The steel facings and insulation core used in our panels are 100% recyclable at the end of their service life
- No VOCs:**
 Our panels and accessories do not produce measurable Volatile Organic Compounds
- No ODP:**
 Our panels have zero Ozone Depleting Potential and there are no limits by the EPA or Environment Canada for its use today or in the future
- No GWP:**
 Our panels meet current EPA blowing agent requirements for the reduction of Global Warming Potential
- Net Zero Energy Targets**
 Insulated Metal Panels can contribute significantly toward Net Zero Energy targets by reducing a building's energy use

Testing and Approvals

Vicwest Panels have been extensively tested under a variety of North American Standards to ensure compliance with various building codes and industry standards.

- FM 4880: Class 1 Fire Rating
- FM 4881: Class 1 Exterior Wall System
- CAN/ULC S102: Flame Spread
- CAN/ULC S101: Fire Endurance
- CAN/ULC S138: Fire Endurance
- CAN/ULC S127: Flammability
- CAN/ULC S126: Flame Spread (Roof)
- ASTM C518/C1363: Thermal Transmission
- ASTM E283: Air Infiltration
- ASTM E331: Water Infiltration
- ASTM E72: Structural Strength
- ASTM E84: Flame Spread
- ASTM E119: Fire Endurance
- AAMA 501.1: Air/Water Infiltration
- FM 4471: Class 1 Panel Roofs
- CAN/ULC S134: Fire Test of Exterior Wall Assemblies

IMPs & LEED®

Insulated Metal Panels are the right choice for creating sustainable buildings. Our panels can help builders accumulate points in 6 categories throughout the construction process that contribute toward LEED® certification in both Canada and the United States:

Category	Credit Name	United States NC v.2.2	Canada NC v.1.0
Sustainable Sites	Heat Island Effect-Roof	SSc7.2	SSc7.2
Energy & Atmosphere	Prerequisites 1, 2, & 3 Optimize Energy Performance	EAc1	EAc1
Materials & Resources	Building Reuse Materials Reuse Recycled Content	MRc1.1, 1.2 MRc3 MRc4	MRc1.1, 1.2 MRc3.1 MRc4.1, 4.2
Indoor Environmental Air Quality	Low-Emitting Materials	IEQc3.2, 7.1	IEQc4.1, 4.2
Innovation in Design		IDc1 to 1.4	IDc1 to 1.4

FASSADE™ Insulated Wall System is suited as a wall for any type of architectural, commercial or industrial applications and in both new and retrofit construction.

The Vicwest Commitment

For more than 85 years, we've understood that people choose Vicwest not only because we build superior products, but because we stand behind them. Every Vicwest product we sell is backed by leading system warranties, comprehensive service, and ultimate reliability. At Vicwest, we're committed to continually improving upon and developing new building products to protect the places where we live, work and play. At Vicwest, we're building for tomorrow.

Note: For more information about building with steel, please refer to the CSSBI publication on the structural integrity of steel building panels.

In accordance with ongoing efforts to improve our products and their performance, Vicwest Building Products reserve the right to change without notice the specifications contained herein.

The contents herein are for general information and illustrative purposes only and are not intended to serve as any type of advice. Every effort is made to ensure the accuracy of the information included in this brochure and it is believed that the information contained herein is accurate and reliable as of the date of publication. Vicwest Building Products does not warrant or represent the accuracy or reliability of any information included in this brochure. Any reliance on any information without consultation with Vicwest Building Products or a duly authorized representative shall be at the user's own risk.

