



- Facade PRO

Architectural solar facades, reimagined

Energy Generating Building Materials:
eFacade PRO Product Datasheet

 MITREX™

⚡ eFacade PRO

eFacade PRO by Mitrex is a high-performance solar facade solution that blends aesthetics with cutting-edge building-integrated photovoltaic (BIPV) technology. This ventilated rainscreen system features an invisible extruded aluminum profile encasing high-efficiency solar cells, paired with a customizable facing available in 48 colors.

Now available in sizes up to 39×80 inches for optimal cost efficiency, eFacade PRO is engineered for durability, energy performance, and architectural versatility. The facing acts as a design canvas—allowing your building to come to life—seamlessly integrating solar power into your building envelope.

For even more customization, including unlimited sizes, colors, and textures, explore Mitrex eFacade PRO+.

☀️ Energy

Generates 7–18W/SF of clean energy while maintaining durability, reducing carbon emissions, and supporting net-zero energy goals.

🏠 Colors & Sizes

With 48 standard colors and custom sizes up to 39×80 inches, this system combines high solar performance with flexible design options across a range of finishes.

🌧️ Rainscreen System

Features ventilated rainscreen system improving thermal performance, reducing moisture, and enhancing energy efficiency.

♻️ Sustainability

Supports lower carbon footprints through clean energy generation, recyclable components, and efficient, low-carbon materials.

🛡️ Certifications

Meets safety standards including UL 61730, UL 61215, ASTM E1996 for impact resistance, and ASTM E330 for wind load performance.

🔥 Fire Safety

Meets global fire safety standards, including NFPA 285 and EN 13501 A2-s1,d0, and is built with non-combustible materials.

🌪️ Performance

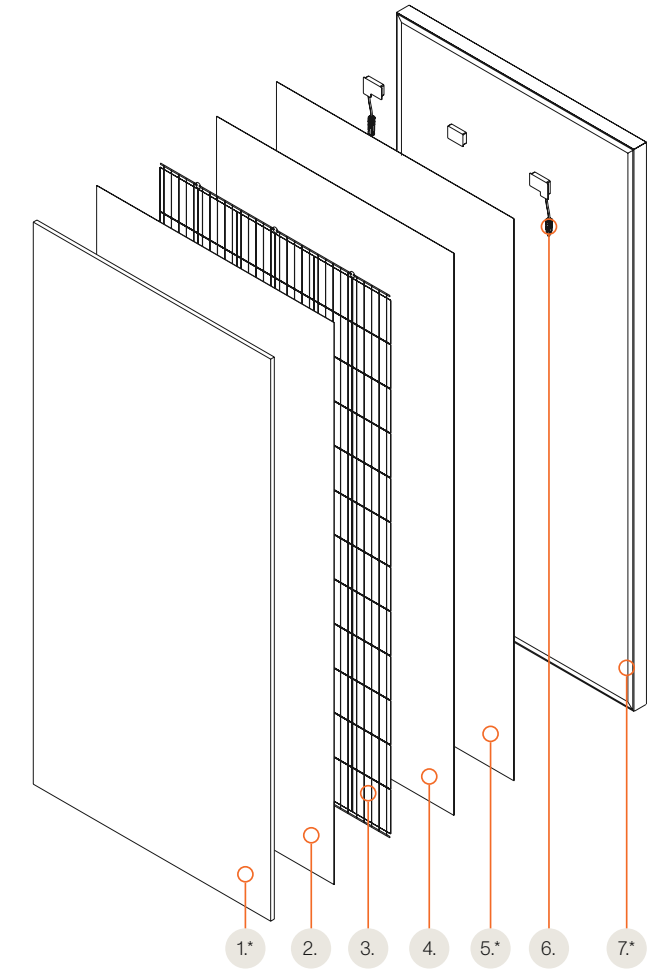
Built with premium materials and tested for durability, this system withstands extreme weather, UV exposure, and thermal stress—ideal for high-performance buildings in any climate.

🔧 Maintenance

Designed for longevity, this system features self-cleaning, UV-resistant modules that resist dirt, fading, and corrosion—requiring minimal upkeep and backed by a 25-year performance warranty.

💰 Incentives

Projects using this system may qualify for sustainability incentives such as government rebates, green energy grants, and low-cost financing across North America.



eFacade PRO Module Details

1. Glass / Customizable Facing - * See page 6 - 8
2. and 4. Encapsulant
3. ⚡ Solar Cells
5. Back Sheet - *See page 8, Section Solar Backsheet Capabilities
6. Junction Box
7. Extruded Aluminum Profile - * See page 8



University Of Toronto - Toronto, ON, Canada



ARCHITECT:
CIMA+
OWNER/ GENERAL CONTRACTOR:
Computer Room Services
Corporation (CRSC)
BUILDING TYPE:
Commercial (Offices)
PROJECT SIZE:
5,000 SQFT
POWER OUTCOME:
Facade Power: 25kW



Royal Bank of Canada - ON, Canada

General Electrical And Mechanical Data

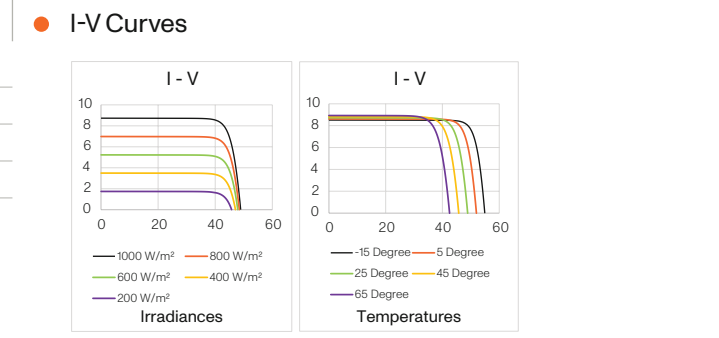
Standard Module Size: 2034 × 994 mm (80 × 39.1 in)

Test	Specification	Engineering Drawing
Test Conditions	STC	
Module Power (Pmax)	See Page 13	
Maximum Power Voltage (Vpmax)	See Page 13	
Maximum Power Current (Ipmax)	See Page 13	
Open Circuit Voltage (Voc)	See Page 13	
Short Circuit Current (Isc)	See Page 13	
Module Efficiency	See Page 13	
Cell Efficiency	22.5% - Monocrystalline Solar Cell	
Maximum System Voltage (VDC)	1000V (IEC/UL)	
Series Fuse Rating	20A	
Power & Other Electrical Specification Tolerance	5%	
Application Classification	Class A	

Measurement Conditions: STC 1000 W/m² - AM 1.5 - Temperature 25°C

Mechanical Properties	Metric	Imperial
Module Weight	37.8kg	83.1lbs
Dimensions (H x L x D)	2034 × 994 × 34mm	80 × 39.1 × 1.3in
Maximum Surface Load (Wind / Snow)	8000Pa rear load / 8000Pa front load	167.1psf rear load / 167.1psf front load
Design Load	5400Pa rear load / 5400Pa front load	112.5psf rear load / 112.7psf front load
Hail Impact Resistance	ø 25mm at 83 km/h	ø 1in at 51.6 mph
Cells	72 [12×6] Mono-crystalline (158.75 × 158.75mm)	72 [12×6] Mono-crystalline (6.25 × 6.25in)
Glass	6mm tempered glass, high transmittance, anti-reflective coating	0.23in tempered glass, high transmittance, anti-reflective coating
Cables & Connectors	1200mm - 4mm ² , 12 AWG (UL), MC4 from Staubli	47.2in - 0.16in ² , 12 AWG (UL) MC4 from Staubli
Backsheet	High durability, UV resistant, PV backsheet	
Frame	Extruded aluminum profile	
Bypass Diodes	3 diodes- 30SQ045T (45V max DC blocking voltage, 30A max forward rectified current)	
Junction Box	IP68 rated, TUV and UL certified	
Fire Rating	Type II	

Temperature Ratings	
Temperature Coefficient Isc	0.036% /°C
Temperature Coefficient Voc	-0.27% /°C
Temperature Coefficient Pmax	-0.36% /°C
Nominal Module Operating Temperature	45 ± 3°C
Operating Temperature	-40°C ~ +85°C



*Varies, These graphics are based on a 345W panel

Colors and Patterns

Finish


Modules feature satin glass, providing a smooth, low-reflective finish that enhances both aesthetics and performance.

Color Variety

Available in 48 colors and patterns, organized into two distinct solar series: Genesis and Exodus.

Design Flexibility

Available in a variety of module sizes, ranging from a maximum of 80 × 39 in (2,034 × 994 mm) to a minimum of 49 × 27 in (1,245 × 686 mm).









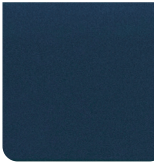





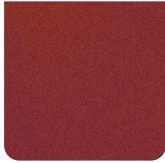



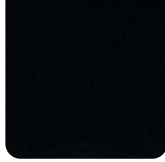


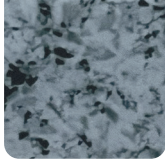


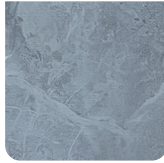
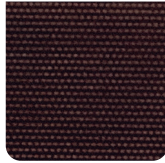
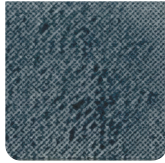
ORDER A FREE SAMPLE!
Experience the look and feel of our solar cladding. Scan the QR code or visit www.mitrex.com to order your free Mitrex sample today.


Mitrex Genesis Series

Mitrex Genesis Solar Series seamlessly blends aesthetics with innovation, offering a diverse range of color options that can be optimized to meet any design vision. These advanced solar facings provide both energy generation and architectural versatility, redefining the possibilities of sustainable building design.

Mitrex Exodus Series

Delivers a sleek, uniform aesthetic with a single-color design per module, ensuring a consistent and sophisticated look. While the color options are fixed, these high-performance solar facings seamlessly integrate renewable energy into any architectural project.

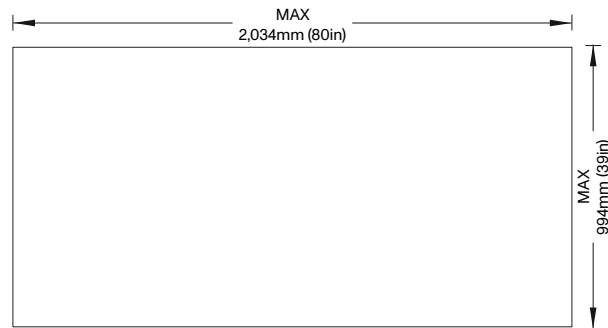
						
Icy White ⚡ 5W/SQFT	Polaris ⚡ 9W/SQFT	Ash Beige ⚡ 11W/SQFT	Gravel Grey ⚡ 11W/SQFT	Smokey Grey ⚡ 10W/SQFT	Charcoal Grey ⚡ 10W/SQFT	Navy Blue ⚡ 11W/SQFT
						
Turquoise ⚡ 7W/SQFT	Peridot ⚡ 5W/SQFT	Dull Yellow ⚡ 6W/SQFT	Dull Orange ⚡ 5W/SQFT	Brown ⚡ 9W/SQFT	Red ⚡ 9W/SQFT	Pale Rose ⚡ 7W/SQFT
						
Beige ⚡ 5W/SQFT	Core Black ⚡ 18W/SQFT	Blackout ⚡ 16W/SQFT	Arcturus - Limestone ⚡ 12W/SQFT	Astra - Limestone ⚡ 11W/SQFT	Moonstone - Granite ⚡ 10W/SQFT	Carbo - Granite ⚡ 15W/SQFT
						
Orbit - Marble ⚡ 16W/SQFT	Rocksalt - Marble ⚡ 11W/SQFT	Cassia - Metal ⚡ 14W/SQFT	Cobaltic - Metal ⚡ 13W/SQFT			

						
Nobel Grey ⚡ 10W/SQFT	Silver Grey ⚡ 10W/SQFT	Ironside Grey ⚡ 13W/SQFT	Monsoon ⚡ 13W/SQFT	Boulder ⚡ 13W/SQFT	Natural Grey ⚡ 13W/SQFT	Iron Filings ⚡ 14W/SQFT
						
Storm Grey ⚡ 13W/SQFT	Gun Smoke ⚡ 13W/SQFT	Ebony Grey ⚡ 13W/SQFT	Ocean ⚡ 15W/SQFT	Deep Ocean ⚡ 15W/SQFT	Blue Jay ⚡ 14W/SQFT	Sea ⚡ 14W/SQFT
						
Purple ⚡ 13W/SQFT	Apple Blossom ⚡ 8W/SQFT	Irish Coffee ⚡ 12W/SQFT	Cocoa Bean ⚡ 9W/SQFT	Wet Sand ⚡ 12W/SQFT	Gold ⚡ 11W/SQFT	Espresso Martini ⚡ 10W/SQFT
						
					Storm Dust ⚡ 8W/SQFT	Pine Cone ⚡ 13W/SQFT

Module Details

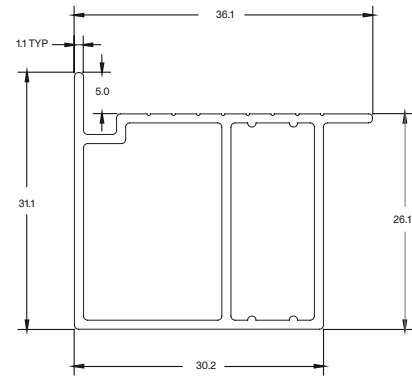
Size Capabilities

Mitrex offers eFacade PRO modules in a wide range of sizes, with a maximum size of 80 × 39 inches. For larger dimensions, please refer to Mitrex eFacade PRO+.



Extruded Aluminum Profile Mechanical Data

	Imperial	Metric
Dimensions (H x L)	1.22 × 1.42in	31.1 × 36.1mm
Weight	0.29lb/ft	0.43kg/m
Elastic Modulus	10,000 psi	69 GPa
Tensile Strength	31,000 psi	214 MPa
Shear Strength	22,000 psi	152 MPa
Material	Aluminum Alloy	



Lifetime Warranty

- Mitrex solar facade products physically last the lifetime of the building and beyond as a building envelope product.
- The warranty guarantees that the energy generation will have a minimum energy output of 80% by year 25. However, energy generation will continue after the warranty period ends for as long as the modules are on the wall.
- Our lifetime warranty ensures reliable, durable facades as the modules require minimal maintenance and there is zero module replacement needed for the building lifetime.

Solar Glass Type

Mitrex offers eFacade PRO with Satin Glass. For other glass options, please refer to Mitrex eFacade PRO+.

Solar Glass Mechanical Data



	Imperial	Metric
Thickness (0.23in / 6mm)	0.23 ± 0.012in	6 ± 0.3mm
Dimensional Tolerance	± 0.04in	± 1.0mm
Density	0.09lbs/in ³	2.5gm/cm ³
Corner	Radius, Chamfer or cut (0.04-0.16in)	Radius, Chamfer or cut (1.0-4.0mm)
Overall Bow / Warp (EN 12150-1:2015)	0.16in / 39.37in	4.0mm/M / 990mm/M
Local Warp (EN 12150-1:2015)	0.002in / 11.8in	0.5mm / 300mm/M
Bending Strength (EN 12150-1:2015) (0.13in / 3.2mm)	516.06lbs/in	90N/mm
Bending Strength (EN 12150-1:2015) (0.23in / 6mm)	685.21lbs/in	120N/mm
Iron Content (ASS)	<120ppm	
Edge	At least seamed	
Scratch Hardness (Mohs)	5	
Fragmented Particles in 50×50mm (If Tempered) (EN 12150-1:2015)	Min 40 pcs	

Solar Glass Facing Specification

	Certification	Imperial	Metric
Density	ASTM C729	158lb/ft ³	2,530kg/m ³
Absorption By Wt.	ASTM C373	0%	0%
Compressive Strength	-	150,000psi	1,000MPa
Flexural Strength (Dry)	ASTM C158	8,700psi	60MPa
Modulus Rupture	ASTM C158	5,950psi	41MPa
Hardness	ASTM C730	570KHN	

For further mechanical information about solar glass, please check Mitrex solar glass datasheet.

Solar Backsheet Capabilities

Backsheet	High durability, UV resistant, PV backsheet
Color	<div style="display: flex; align-items: center; gap: 10px;"> <div style="text-align: center;">  <p>Black Backsheet</p> </div> <div style="text-align: center;">  <p>White Backsheet</p> </div> </div>

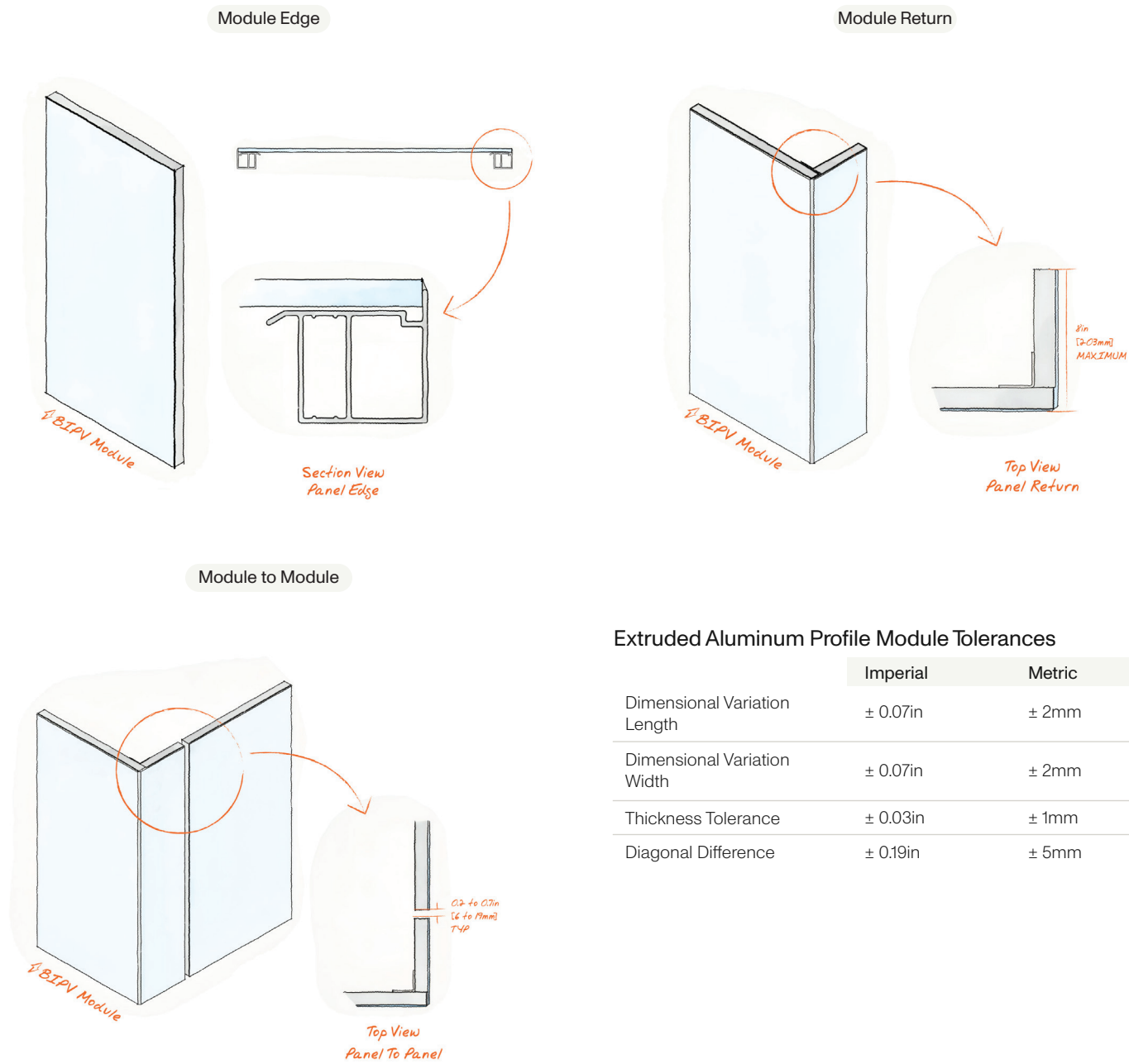
Testing and Certifications

Category	Test Name	Test Specification	Result
Acoustic	Sound Transmission Loss	ASTM E90	Sound Transmission Rating: CladiShield Rainscreen: 34; Claditized Unitized: 35; CladiFab Prefab: 55
	Salt Spray Resistance	ASTM B117-16	No deleterious effects.
Environmental	Air Leakage Resistance	ASTM E283-04 (2012)	LITE, PRO, CladiShield: Qinf = 0.031 cfm/ft ² or 0.155 L/s-m ² at 300 Pa; Qexf = 0.024 cfm/ft ² or 0.122 L/s-m ² at 300 Pa
	Water Penetration Resistance	ASTM E331	No water infiltration at 15 psf or 720 Pa
	Dust and Sand Test	IEC 60068-2-68	No visual anomalies
	Cyclic Salt Mist Exposure	IEC 61701 (2011)	No significant corrosion or ingress
	Moist Ammonia Exposure	IEC 62716 (2013)	No significant corrosion or ingress
	Fire Safety	Standard Methods of Fire Endurance Tests of Building Construction Materials	ASTM E119 / CAN/ULC S101
Exterior Wall Assembly Fire Test		CAN/ULC S134	Passed
Fire Classification		EN13501	Rating: A2-s1,d0
Tunnel Test		ASTM E84	FSI = 10; SDI = 200; Class A
Non-Combustibility (ASTM E136)		ASTM E136	Passed
Multi-Story Fire Test		NFPA 285	Passed
Surface Burning Characteristics		CAN/ULC S102	FSR = 0; Class A
Non-Combustibility (CAN/ULC S114)		CAN/ULC S114	Passed
Combustibility Parameters (Cone Calorimeter)		CAN/ULC S135	Passed NBCC 2015 requirements
Cyclic Pressure Loading		ASTM E1886 / TAS 203	Passed. Over 3,500 positive and negative pressure cycles were applied at ± 2880 Pa (60 psf), equivalent wind load of 165 mph.
Impact / Safety	Structural Performance by Uniform Static Air Pressure Difference	ASTM E330	LITE, PRO, CladiShield: Design Load at +/-80 psf or +/- 3840 Pa; No Failure
	Linear Thermal Expansion	ISO 10545-8	11.28 × 10 ⁻⁶ /°C
Thermal	Terrestrial Photovoltaic (PV) Modules - Design Qualification and Type Approval	IEC/UL 61215	Passed
	Potential-Induced Degredation (PID)	IEC TS 62804-1:2025	Passed
	Standard for Photovoltaic (PV) Module Safety	IEC/UL 61730	Passed
PV Quality			
PV Safety			



Corners & Edges Details

At Mitrex, every detail matters—right down to the corners and edges. eFacade PRO corner and edge solutions are engineered to maintain the aesthetic continuity of the building envelope while ensuring performance, safety, and durability.



Extruded Aluminum Profile Module Tolerances

	Imperial	Metric
Dimensional Variation Length	± 0.07in	± 2mm
Dimensional Variation Width	± 0.07in	± 2mm
Thickness Tolerance	± 0.03in	± 1mm
Diagonal Difference	± 0.19in	± 5mm

Request Your Mitrex Architectural Box

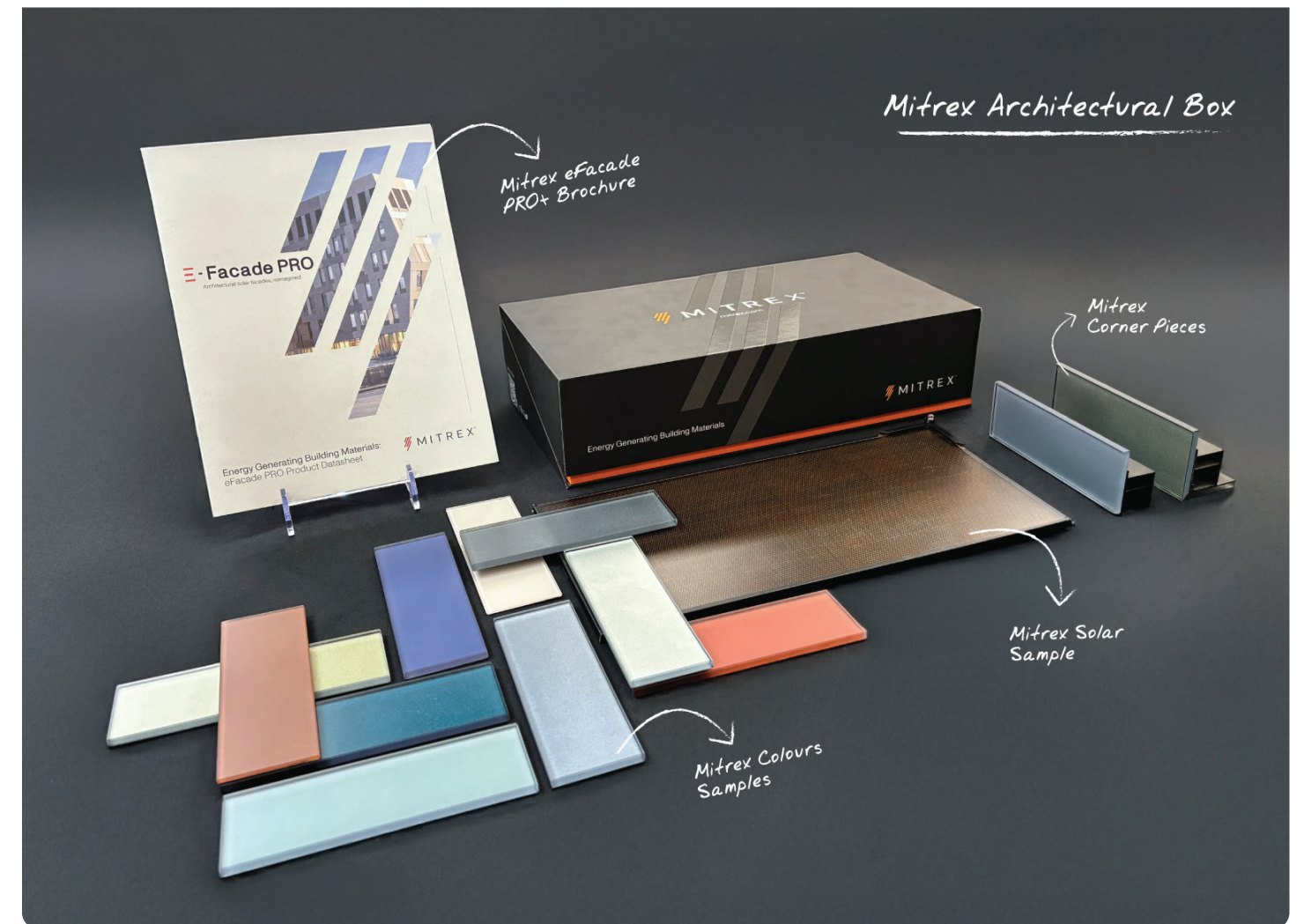
The Mitrex Architectural Box is a curated toolkit that brings the potential of eFacade PRO directly to your hands. Designed with architects in mind, this box features a complete snapshot of our solar cladding system's capabilities — including a physical brochure, scaled-down corner and edge profiles, an active eFacade PRO sample, and a range of color chips showcasing our standard Genesis and Exodus finishes.

Whether you're exploring façade aesthetics, energy performance, or system integration, this box offers a tangible preview of what Mitrex can deliver.

Contact us at info@mitrex.com to request your sample box today. Let's build the future — beautifully and sustainably.

ORDER A FREE ARCHITECTURAL BOX!

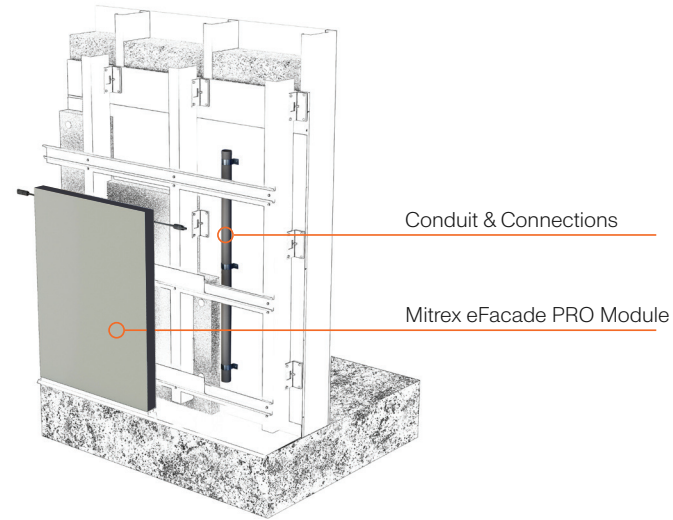
Experience the look and feel of our solar cladding. Scan the QR code or visit www.mitrex.com to order your free Mitrex architectural box today.



System Details

Cladishield Rainscreen System

With Cladishield Rainscreen system, you don't just get cladding modules—you get a complete wall solution. Provided by Mitrex's sister company, Cladify, the system is a comprehensive package that includes a high-performing air and moisture barrier, continuous insulation, adjustable sub-framing systems, and, of course, our exceptional multi-facing cladding.



Test	Rating
Smoke And Flame Spread (ASTM E84)	Class A
Sound Transmission Coefficient (ASTM E90)	34

Tolerances Details

	Imperial	Metric
Dimensional Variation Length	± 0.07in	± 2mm
Dimensional Variation Width	± 0.07in	± 2mm
Thickness Tolerance	± 0.03in	± 1mm
Diagonal Difference	± 0.19in	± 5mm



Electrical Data

● Model Name	● Module Power (W/SF)	● Max. Power Current - Imax (A)	● Max. Power Voltage - Vmax (V)	● Short Circuit Current - Isc (A)	● Open Circuit Current - Voc (V)	● Module Efficiency (%)
Apple Blossom	8	4.16	40.90	4.44	47.50	8%
Arcturus	12	6.26	42.30	7.36	48.40	13%
Ash Beige	11	5.20	40.40	5.45	47.90	11%
Astra	11	6.92	42.60	8.20	48.70	12%
Beige	5	2.61	40.30	2.74	46.90	5%
Blackout	16	8.62	40.60	9.07	48.90	17%
Blue Jay	14	7.59	40.20	7.90	48.50	15%
Boulder	13	6.90	40.60	7.23	48.50	14%
Brown	9	4.62	41.10	4.96	47.70	9%
Carbo	15	6.85	41.60	7.12	48.10	16%
Cassia	14	7.32	41.00	7.74	48.60	15%
Charcoal Grey	10	5.43	40.50	5.71	48.00	11%
Cobaltic	13	6.14	40.70	6.49	48.30	14%
Cocoa Bean	9	4.62	41.10	4.96	47.70	9%
Core Black	18	9.31	41.90	9.97	48.20	19%
Deep Ocean	15	8.17	40.40	8.55	48.70	16%
Dull Orange	5	3.21	40.50	3.39	47.10	6%
Dull Yellow	6	3.21	40.50	3.39	47.10	6%
Ebony Grey	13	7.00	40.70	7.36	48.60	14%
Espresso Martini	10	5.43	40.50	5.71	48.00	11%
Gold	11	5.67	40.60	5.97	48.10	11%
Gravel Grey	11	5.97	40.20	6.19	48.10	12%
Gun Smoke	13	7.00	40.70	7.36	48.60	14%
Icy White	5	3.21	40.50	3.39	47.10	6%
Irish Coffee	12	6.44	40.40	6.71	48.30	13%
Iron Filings	14	7.48	40.10	7.77	48.40	15%
Ironside Grey	13	6.67	40.50	6.97	48.40	13%
Monsoon	13	6.77	40.60	7.10	48.50	14%
Moonstone	10	5.38	40.90	5.71	48.00	11%
Natural Grey	13	7.00	40.70	7.36	48.60	14%
Navy Blue	11	6.08	40.30	6.32	48.20	12%
Nobel Grey	10	5.20	40.40	5.45	47.90	10%
Ocean	15	7.94	40.30	8.29	48.60	16%
Orbit	16	7.95	40.90	8.34	48.60	17%
Pale Rose	7	3.45	40.60	3.66	47.20	7%
Peridot	5	3.21	40.50	3.39	47.10	6%
Pine Cone	13	6.77	40.60	7.10	48.50	14%
Polaris	9	4.16	40.90	4.44	47.50	9%
Purple	13	6.90	40.60	7.23	48.50	14%
Red	9	4.62	41.10	4.96	47.70	9%
Rocksalt	11	5.74	41.80	6.17	48.30	12%
Sea	14	7.48	40.10	7.77	48.40	15%
Silver Grey	10	5.43	40.50	5.71	48.00	11%
Smokey Grey	10	5.43	40.50	5.71	48.00	11%
Storm Dust	8	4.26	41.00	4.57	47.60	9%
Storm Grey	13	6.90	40.60	7.23	48.50	14%
Turquoise	7	3.68	40.70	3.92	47.30	7%
Wet Sand	12	6.44	40.40	6.71	48.30	13%



• Kingston, ON, Canada

ARCHITECT:
RLA Architecture
DEVELOPER:
Homestead Land Holdings
BUILDING TYPE:
Residential / Office Building

PROJECT SIZE:
6,000 SQFT
POWER OUTCOME:
37kW



• Edmonton, AB, Canada

ARCHITECT:
MBC Group
OWNER / DEVELOPER:
Avenue Living/Logyx Solutions
BUILDING TYPE:
Residential Retrofit

PROJECT SIZE:
30,534 SQFT
POWER OUTCOME:
267kW



• Toronto, ON, Canada

ARCHITECT:
Paradigm Architecture + Design
DEVELOPER:
Sionito Group
BUILDING TYPE:
Long Term Care Residential Building

PROJECT SIZE:
Solar Facade: 50,432 SQFT
Solar Railing: 2,360 LFT
POWER OUTCOME:
Solar Facade: 350kW
Solar Railing: 11kW



• Chinook Hospital, AB, Canada

ARCHITECT:
Reimagine Architects
OWNER / DEVELOPER:
Alberta Health Services
BUILDING TYPE:
Hospital / Medical

PROJECT SIZE:
9,000 SQFT
POWER OUTCOME:
58kW

Mitrex eFacade Products Comparison

Mitrex offers three distinct solar cladding solutions—eFacade LITE, eFacade PRO, and eFacade PRO+—each engineered to meet varying project needs in terms of design flexibility, performance, and scale.

The table below provides a detailed comparison across key features such as colors and finishes, sizing options, weight, system compatibility, and testing standards. Whether you're prioritizing affordability, customization, or advanced performance, this side-by-side overview will help you identify the best fit for your project.

	• eFacade LITE	• eFacade PRO	• eFacade PRO+
Colors & Patterns	5 color options	48 color options	Unlimited customizable colors & patterns
	Finish: Satin glass Thickness: 0.24in (6mm)	Finish: Satin glass Thickness: 0.24in (6mm)	Finish: Super satin, satin, matte, glossy, wood grain, aqualite, and more. Thickness: 0.12-0.47in (3.2-12mm)
Sizes & Weight	2 size options: 73 × 36 in (1854 × 922 mm) 73 × 18 in (1854 × 456 mm)	Custom sizes up to 80 × 39 in (2030 × 990mm).	Customizable single piece sizes up to 125 × 80 in (3,175 × 2,030mm). Preassembled pieces up to 420 inches (10.7m) long.
	Weight: 3.87 lb/SQFT (18.9 kg/sqm)	Weight: 3.84 lb/SQFT (18.8 kg/sqm)	Weight: 3.1 - 4.7 lb/SQFT (15.4-23.1 kg/sqm)
	Backing: Extruded aluminum profile with module thickness of 1.3in (34mm)	Backing: Extruded aluminum profile with module thickness of 1.3in (34mm)	Backing options: <u>Extruded aluminum profile with module thickness: 1.3in (34mm).</u> <u>Aluminum honeycomb with module thickness:</u> • 1 in (25mm) honeycomb: 1.18in (30.2mm) - 1.23 in (33mm). • 2 in (50mm) honeycomb: 2.17in (55.2mm) - 2.28 in (58mm).
	Shapes: rectangle	Shapes: rectangle	Customizable Shapes: rectangle, triangle, circle, and more
Systems	Ventilated rainscreen system, eFacade LITE system	Ventilated rainscreen system (interlocking channel or anchor plate)	Customizable rainscreen, unitized or prefabricated system options
	System Thickness: 3.9in (101mm)	System Thickness: 1.5 in (39mm) - 2.32 (59mm)	System Thickness: 1.42 in (36mm) - 4.33in (110mm)
	MOQ of 5,000 SQFT (464.5 sqm)	MOQ of 5,000 SQFT (464.5 sqm)	MOQ of 25,000 SQFT (2,322.5 sqm)
Testing	3rd party tested	3rd party tested	3rd party tested
	Code-compliant & safety tested	Code-compliant & safety tested	Code-compliant & safety tested
	Fire tested	Fire tested	Fire tested

For more information about Mitrex eFacade products, visit mitrex.com or email us at info@mitrex.com

- **Toll Free**

+1 (855) 254 0214

- **Learn More**

mitrex.com

info@mitrex.com

- **Headquarters**

41 Racine Rd, Toronto, ON M9W2Z4, Canada

+1 (416) 497 7120

- **USA Office**

Chrysler Building, 405 Lexington Avenue Floor 26, New York, USA, 10174

+1 (646) 583 4486

Mitrex and Cladify Projects



100% Recyclable

