



- Facade LITE

Plug & Power Up! - As easy as it sounds

Energy Generating Building Materials:
eFacade LITE Product Datasheet

 **MITREX**[™]
mitrex.com

And Mechanical Data

Panel 1854x922x34mm (72.9x36.2x1.3in)

● Specification	● Engineering Drawing
STC	
170 - 315 W	
410 - 413 V (max)	
4.15 - 7.63 A (max)	
49.2 - 49.6V	
4.38 - 8.05 A	
9.9 - 18.4%	
23.5% - Monocrystalline Solar Cell	
1000V (IEC/UL)	
20A	
5%	
Class A	

Measurement Conditions: STC 1000 W/m² - AM1.5 - Temperature 25°C

SunTile Electrical And Mechanical Data

For Small Standard Panel 1854x456x34mm (72.9x18.0x1.3in)

● Test	● Specification	● Engineering Drawing
Test Conditions		
Module Power (Pmax)	85 - 160 W	
Maximum Power Voltage (Vpmax)	41.0 - 41.3 V	
Maximum Power Current (Ipmax)	2.07 - 3.87 A	
Open Circuit Voltage (Voc)	49.2 - 49.6 V	
Short Circuit Current (Isc)	2.19 - 4.03 A	
Module Efficiency	10.0 - 18.9 %	
Cell Efficiency	23.5% - Monocrystalline Solar Cell	
Maximum System Voltage (VDC)	1000V (IEC/UL)	
Max Series Fuse Rating	20A	
Power & Other Electrical Specification Tolerance	5%	
Application Classification		
Class A		

Measurement Conditions: STC 1000 W/m² - AM1.5 - Temperature 25°C

● Metric	● Imperial
32.3kg	71.2lbs
1854 x 922 x 34mm	72.9 x 36.2 x 1.3in
2400Pa rear load / 2400Pa front load	50psf rear load / 50psf front load
1600Pa rear load / 1600Pa front load	33psf rear load / 33psf front load
ø 25mm at 83 km/h	ø 1in at 51.6 mph
128 [2 x (2 x 32)] Mono-crystalline M12 quarter cell (210.0 x 52.5mm)	128 [2 x (2 x 32)] Mono-crystalline M12 quarter cell (8.26 x 2.07in)
6mm tempered glass, high transmittance, anti-reflective coating	0.24in tempered glass, high transmittance, anti-reflective coating
High durability, UV resistant, PV backsheet	
Black anodized aluminum frame	
IP68 rated, TUV and UL certified	
Spread of Flame A, Burning Brand C	

● Mechanical Properties	● Metric	● Imperial
Module Weight	16.9kg	37.2lbs
Dimensions (H x L x D)	1854 x 456 x 34mm	72.9 x 18.0 x 1.3
Maximum Surface Load (Wind / Snow)	2400Pa rear load / 2400Pa front load	50psf rear load / 50psf front load
Design Load	1600Pa rear load / 1600Pa front load	33psf rear load / 33psf front load
Hail Impact Resistance	ø 25mm at 83 km/h	ø 1in at 51.6 mph
Cells	64 [32 x 2] Mono-crystalline M12 quarter cell (210.0 x 52.5mm)	64 [32 x 2] Mono-crystalline M12 quarter cell (8.26 x 2.07in)
Glass	6mm tempered glass, high transmittance, anti-reflective coating	0.24in tempered glass, high transmittance, anti-reflective coating
Backsheet	High durability, UV resistant, PV backsheet	
Back Support	Black anodized aluminum frame	
Junction Box	IP68 rated, TUV and UL certified	
Fire Rating	Spread of Flame A, Burning Brand C	

● Temperature Ratings	
Temperature Coefficient Isc	0.05% /°C
Temperature Coefficient Voc	-0.28% /°C
Temperature Coefficient Pmax	-0.35% /°C
Nominal Module Operating Temperature	45 ± 3°C
Operating Temperature	-40°C - +85°C

● Temperature Ratings	
Temperature Coefficient Isc	0.05% /°C
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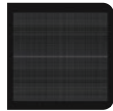






With eFacade LITE

eFacade LITE Crafted For Perfection

Mitrex eFacade LITE is available in five clean, neutral color tones to blend with any project. These curated options are designed to complement a wide range of architectural materials such as aluminum panels, GFRG, EIFS, and ACM. Whether your design calls for a bold contrast or understated elegance, LITE's palette offers the flexibility to enhance visual cohesion across facades.

The colors are not just applied finishes; they are built into the solar panel surface, preserving both appearance and performance over time. The satin glass finish ensures a low-glare, consistent aesthetic that integrates cleanly into contemporary architectural styles.

	Core Black ⚡ 18W/SQFT ⚡ 2.5 KW*		Blackout ⚡ 16W/SQFT ⚡ 2.2 KW*		Nobel Grey ⚡ 10W/SQFT ⚡ 1.3 KW*		Storm Grey ⚡ 13W/SQFT ⚡ 1.8 KW*		Cassia ⚡ 14W/SQFT ⚡ 2.0 KW*
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*These system sizes are based on one standard package consisting of 150 SQFT.



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.

Module Size Capabilities

Mitrex eFacade LITE offers two standard sizes that can be seamlessly integrated with other modules of the same size or between the two sizes.

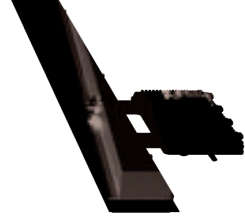


eFacade LITE Package Components

Each eFacade LITE package comes with the following components. The amount of each is listed on the layout.



x2 Support



x1 Power



⚡ Large SunTile

Lifetime Warranty

- Mitrex solar facade products physically last 25 years and beyond as a building envelope.
- The warranty guarantees that the energy production will continue after the warranty period. A minimum energy output of 80% by the end of the warranty period. The panels are on the wall.
- Our lifetime warranty ensures reliability and requires minimal maintenance and repair.

Module Details

Material

Property	Imperial	Metric
Thickness	0.125 in	3.175 mm
Weight	1.5 lb/sqft	72.7 kg/m ²
Tensile Modulus	10 x 10 ⁶ psi	69 GPa
Tensile Strength	0.21 x 10 ⁵ psi	145 MPa
Shear Strength	0.17 x 10 ⁵ psi	117 MPa
Material	Aluminum Alloy	

Dimensions

Length	72 in	1829 mm
Width	36 in	914 mm
Weight	120 lbs	54.4 kg
Volume	1080 in ³	17.6 m ³

Performance

Temperature Range	-40 to +149 F°	-40 to +65 C°
Enclosure Rating	Outdoor - IP67 (NEMA6)	
Cooling	Natural Convection - No Fans	

Efficiency

CEC Peak Efficiency	97.5%
Normal MPPT Efficiency	98.5%
Night Power Consumption (mW)	10

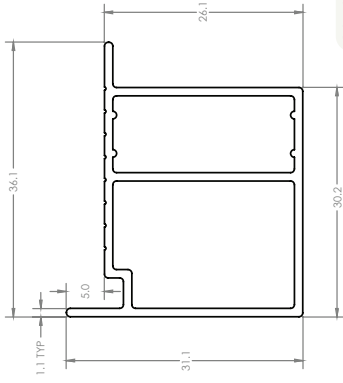
Output Data (AC)

Peak Output Power	450W
Maximum Continuous Output Power (A)	16.7A
Maximum Continuous Output Current (A)	16.7A
Normal Output Voltage/Range (V)	120V
Nominal Frequency/Range (Hz)	60Hz
Power Factor (Adjustable)	0.95
Total Harmonic Distortion	5%
Maximum Units Per 8AWG Branch (450W)	10

For more information, please check Mitrex solar glass datasheet.

Module Frame Mechanical Data

Property	Imperial	Metric
Dimensions	1.42 x 1.22 in	36.1 x 31.1 mm
Weight	0.29 lb/ft	0.43 kg/m
Tensile Modulus	10 x 10 ⁶ psi	69 GPa
Tensile Strength	0.21 x 10 ⁵ psi	145 MPa
Shear Strength	0.17 x 10 ⁵ psi	117 MPa
Material	Aluminum Alloy	



Module Frame Detail

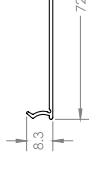
Test

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

System Components Details

Power Bar (Mounting Rail and Cap) Mechanical Data

Property	Imperial	Metric
Dimensions	4.80 x 2.44 in	122 x 62 mm
Weight	1.24 lb/ft	1.84 kg/m
Tensile Modulus	10 x 10 ⁶ psi	69 GPa
Tensile Strength	0.21 x 10 ⁵ psi	145 MPa
Shear Strength	0.17 x 10 ⁵ psi	117 MPa
Material	Aluminum Alloy	



Power Bar

Microinverter Details

Mechanical Data

Property	Imperial	Metric
Ambient Temperature Range	-40 to +149 F°	-40 to +65 C°
Enclosure Rating	Outdoor - IP67 (NEMA6)	
Cooling	Natural Convection - No Fans	

Input Data (DC)

Property	Model 480V
Commonly Used Module Power (W)	50 to 1000 +
Maximum Input Voltage (V)	65
MPPT Voltage Range (V)	16 - 60
Start-up Voltage (V)	22
Maximum Input Current (A)	4 x 30
Maximum Input Short Circuit Current (A)	4 x 40
Number Of MPPTs	4
Number Of Inputs Per MPPT	1

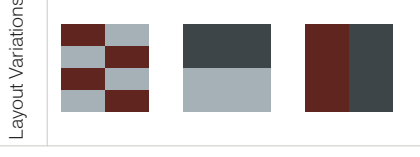
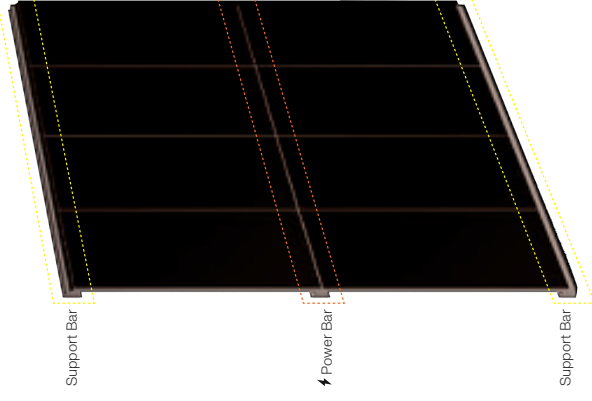
¹Nominal voltage/frequency range can vary depending on local requirements. ²Refer to local requirements for exact number of microinverters per branch

Applications Details

eFacade LITE Layout Options

	● Test Specification	● Result
Acoustic Transmission Loss	ASTM E90	Sound Transmission Rating: CladShield Rainscreen: 34; CladShield Untitized: 35; CladFab Prefab: 55
Dimensional Change	ASTM B117-16	No deleterious effects.
Dimensional Change of Sandwich Construction	ASTM C481-99 (Reapproved 2016)	ASTM C273; C297; C364; C393 tests were reconstituted after aging: the variation was +1.36 %, -5.90%, +2.55%; -7.96%. Note: Positive variation indicates no decrease in strength after aging.
Dimensional Change Rapid Freezing and Thawing	ASTM C666/C666M-15	No visible change to panel
Dimensional Change	ASTM E283-04 (2012)	$Q_{inf} = 0.031 \text{ cfm/ft}^2$ or 0.155 L/s-m^2 at 300 Pa. $Q_{exf} = 0.024 \text{ cfm/ft}^2$ or 0.122 L/s-m^2 at 300 Pa
Dimensional Change Exposure	ASTM G154 -16	No visible change
Dimensional Change on Resistance	ASTM E331	No water infiltration at 15 psf or 720 Pa
Dimensional Change Test	ASTM E119 / CAN/ULC S101	Passed
Dimensional Change Assembly Fire Test	CAN/ULC S134	Passed
Dimensional Change on	EN13501	Rating: A2-s1,d0
Dimensional Change Ability (ASTM E136)	ASTM E84	FSI = 10; SDI = 200; Class A
Dimensional Change Test	ASTM E136	Passed
Dimensional Change Characteristics	NFPA 285	Passed
Dimensional Change Characteristics (CAN/ULC S102)	CAN/ULC S102	FSR = 0; Class A
Dimensional Change Ability (CAN/ULC S114)	CAN/ULC S114	Passed
Dimensional Change Parameters (Cone Calorimeter)	CAN/ULC S135	Passed NBCC 2015 requirements
Dimensional Change Impact Test	ASTM E1996 / TAS 201	Passed
Dimensional Change Loading	ASTM E1886 / TAS 203	Passed. Over 3,500 positive and negative pressure cycles were applied at $\pm 2,880 \text{ Pa}$ (60 psf), equivalent wind load of 165 mph. Ultimate core shear strength = 1.01 MPa (147 psi). Core shear modulus = 10.9 MPa (1583 psi)
Dimensional Change and Shear Modulus	ASTM C273/C273M-18	Max core shear strength = 0.94 MPa (137 psi); Facing bending stress = 8.14 MPa (1180 psi)
Dimensional Change by Beam Flexure	ASTM C393/C393M-16	
Dimensional Change Evaluation	ASTM C480/C480M-16	Net creep (in/day) facing - 0.029
Dimensional Change which Core	ASTM C271/C271M-16	327 kg/m^3 (20.42 lbm/ft ³)
Dimensional Change Bond Strength	ASTM C297/C297M-16	1.52 MPa (220 psi)
Dimensional Change compressive Strength	ASTM C364/C364M-16	37.85 MPa (5490 psi)
Dimensional Change compressive Strength	ASTM C365	1.02 MPa (278 psi)
Dimensional Change Tensile Strength of Adhesive Bond	ASTM C880/C880M-15	22.83 MPa (3311.21 psi). No failure
Dimensional Change Adhesive Bond	ASTM C937-08 (2016)	Adhesive bond did not fail
Dimensional Change Adhesive Bond	ASTM D7766/D7766M-16	No panel deformation
Dimensional Change Adhesive Bond	ASTM E330	$\pm 80 \text{ psi}$ or $\pm 3840 \text{ Pa}$; no failure
Dimensional Change Thermal Expansion	ASTM 1363-11	$0.20 \text{ m}^2 \cdot \text{C/W}$ ($1.12 \text{ hr} \cdot \text{ft}^2 \cdot \text{F/BTU}$)
Dimensional Change Expansion	ISO 10545-8	$11.28 \times 10^{-6} / \text{C}$
Dimensional Change Polymeric (PV) Modules - Design	IEC/UL 61215	Passed
Dimensional Change Polymeric (PV) Modules - Design	IEC/UL 61215	Passed
Dimensional Change Polymeric (PV) Modules - Design	IEC/UL 61730	Passed

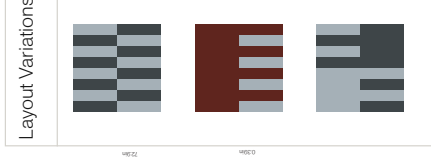
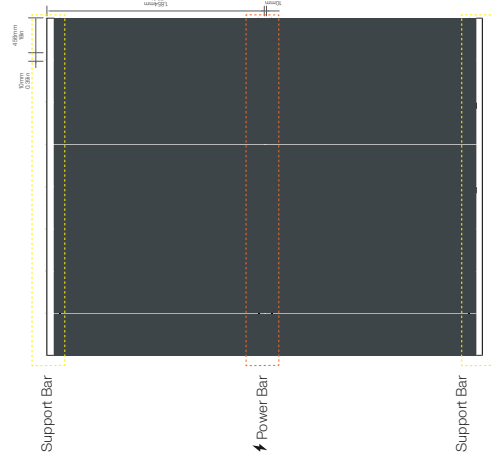
eFacade LITE Linear Precision



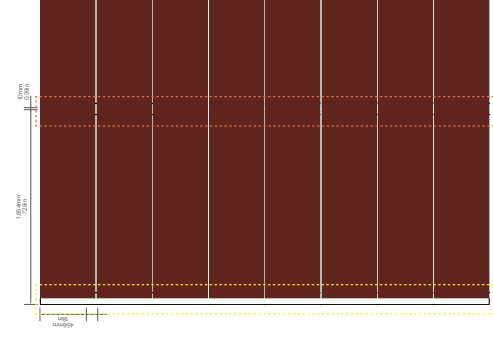
eFacade LITE Horizon Grid



eFacade LITE Half Linear Precision

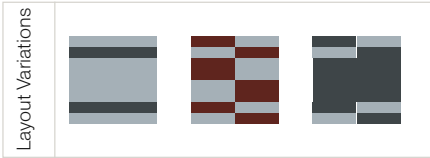
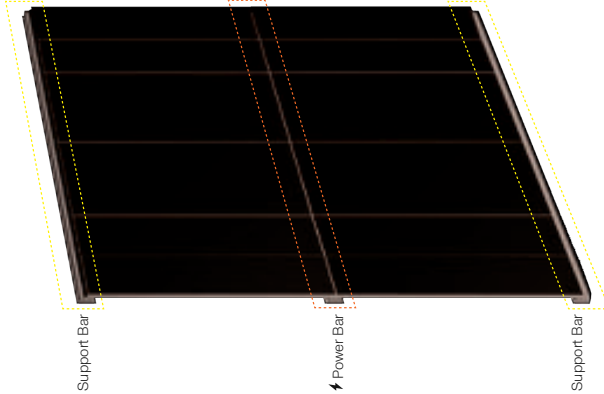


eFacade LITE Half Horizon Grid

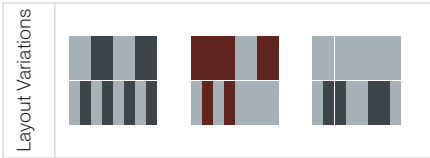
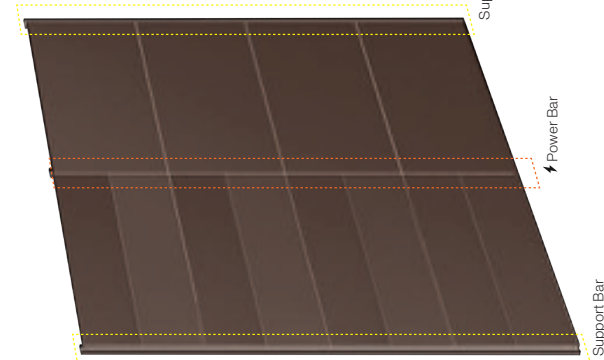


eFacade LITE Layout Options

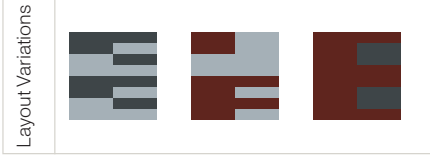
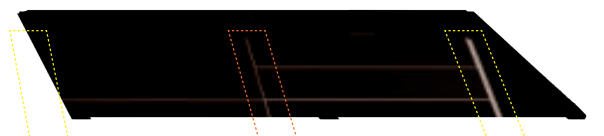
More eFacade LITE Dual Linear Precision



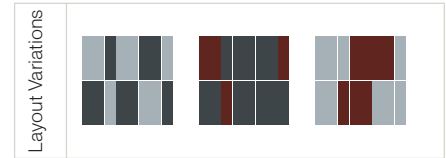
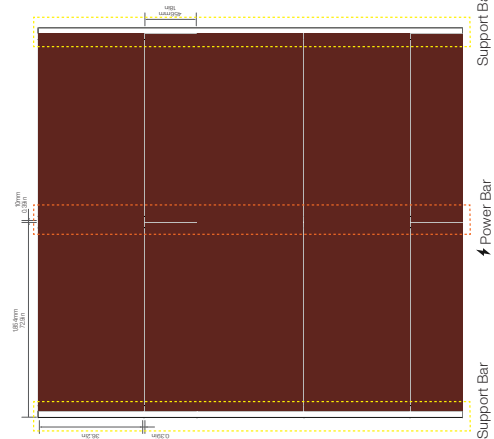
eFacade LITE Dual Horizon Grid



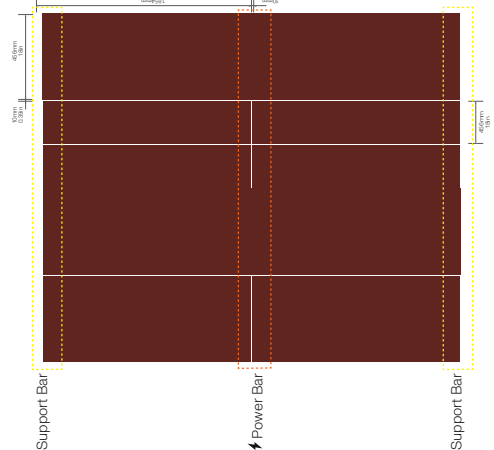
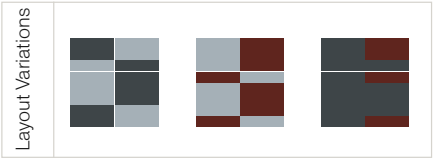
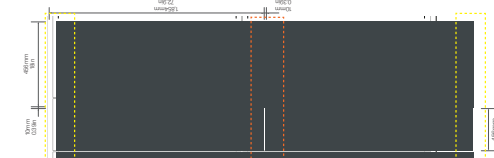
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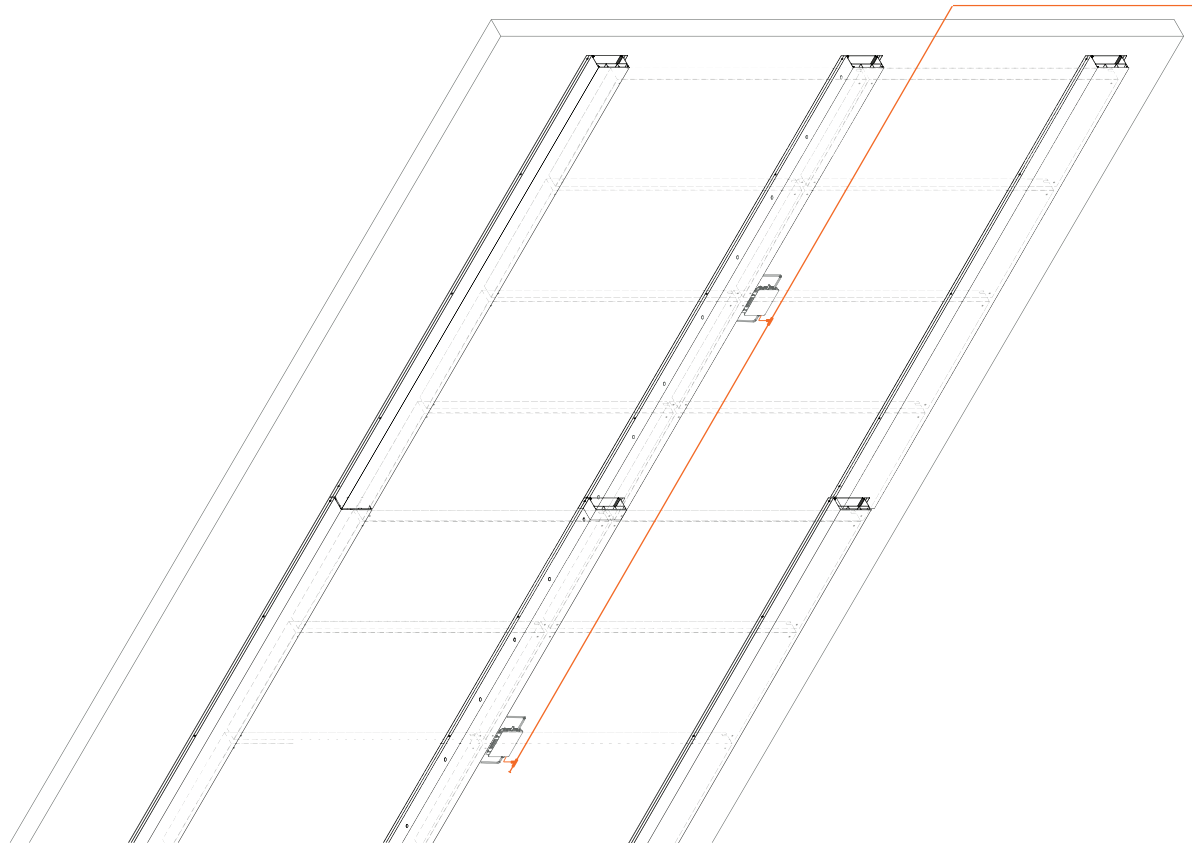
eFacade LITE Mixed Horizon Grid



ision



Electrical Connection



AC trunk cable - Connection to next microinverter or building panel

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 Finish: Satin glass Thickness: 0.24in (6mm)	48 color options Finish: Satin glass Thickness: 0.24in (6mm)	Unlimited color options Finish: Satin glass Thickness: 0.24in (6mm)
Sizes & Weight	2 size options: 73 x 36 in (1854 x 922 mm) 73 x 18 in (1854 x 456 mm) Weight: 3.87 lb/SQFT (18.9 kg/sqm)	Custom sizes up to 80 x 39 in (2034 x 994mm). Weight: 3.84 lb/SQFT (18.8 kg/sqm)	Custom sizes up to 80 in (2032 mm) x 36 in (914 mm) or 80 in (2032 mm) x 18 in (457 mm) (10.7m) long Weight: 3.84 lb/SQFT (18.8 kg/sqm)
Systems	Shapes: rectangle Ventilated rainscreen system, eFacade LITE system System Thickness: 3.78 in (96mm) MOQ of 150 SQFT (13.9 sqm) 3rd party tested Code-compliant & safety tested Fire tested	Shapes: rectangle Ventilated rainscreen system (interlocking channel or anchor plate) System Thickness: 1.5 in (39mm) - 2.32 (59mm) MOQ of 500 SQFT (46.4 sqm) 3rd party tested Code-compliant & safety tested Fire tested	Shapes: rectangle, circle, and square Customized rainscreen system or prefabricated panel System Thickness: 4.33in (110mm) MOQ of 1000 SQFT (92.9 sqm) 3rd party tested Code-compliant & safety tested Fire tested

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

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Mitrex and Cladify Projects

