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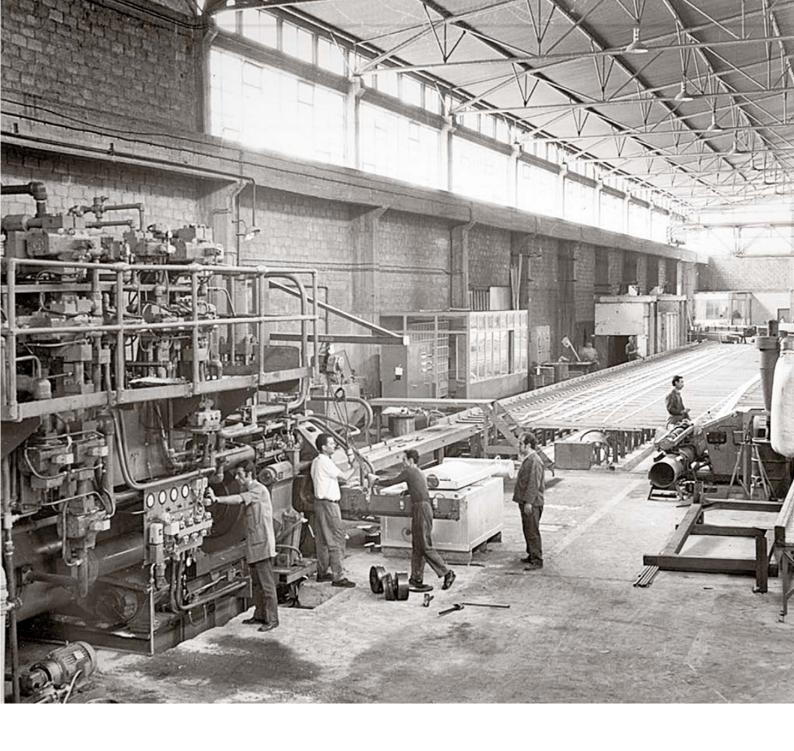


# THRIVING CONTINUOUSLY FOR 50 YEARS

ETEM was founded in 1971 and today is one of the largest and most technologically advanced aluminium extrusion industries in Europe.

The company is the first integrated designer and producer of aluminium systems in Greece and applied the first curtain walling system in a high-rise building, in the early 1970s (Tower of Athens, 103 m)

With over 50 years of experience and continuous presence in both the design and production of profiles for architectural systems and different industrial applications, the company is committed to serving its customers with value added services and solutions.



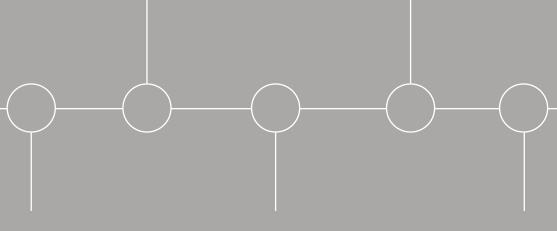
## **MILESTONES**

## 1973

ETEM's products are installed in the 1st high rise building in Athens, Tower of Athens (103 m)

## 1983

Installation of the most powerful extrusion press line in the Balkan area 2,750 US tons (25MN)



1971

The company was founded as a Limited Liability

Company (LTD)

1981

Installation of a powder coating line & anodising unit.

1984

Launching the new pioneering Achitectura systems (lines F)

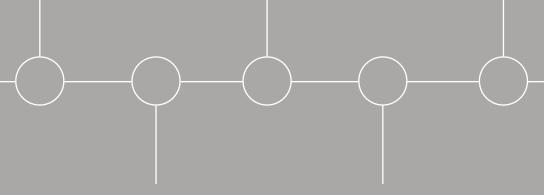
European acknowledgement "LA DEFENSE PROJECT" in Paris

## 2000

Installation of a 5,500 US tons (50MN) extrusion line, the most powerful in SE Europe. Strategic partnership with the automotive Industry for processed AL components

## 2002

Installation of a new vertica Powder-coating equipment for extruded profiles, and ageing ovens



1999

Installation of 24 MN extrusion line in Athens

## 2001

Construction of new storage facilities (20,000 m2) in Athens, Greece

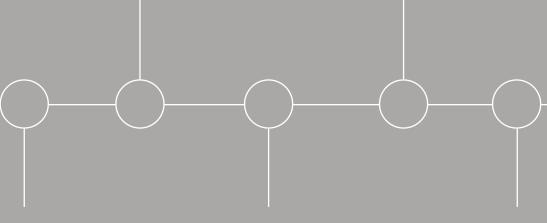
## **MILESTONES**

## 2007

ETEM innovates with Ventilated Façade Systems (VFS)

## 2013

nstallation of 24MN extrusion ine in Sofia, Bulgaria.



2004-2005

Establishment of new subsidiaries in Serbia, Romania & Ukraine

2010

Installation of 2 new extrusion lines (18MN and 28MN) in Sofia, Bulgaria. Installation of new hightech horizontal Powder-Coating line in Athens Greece 2013

Crash relevant profiles
certification for the Automotive
industry is achieved. ETEM
is awarded new contracts
with major Automotive
manufacturers (Daimler,
Jaguar-Landrover, BMW etc)

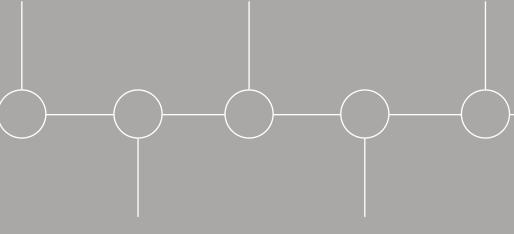
## 2015

The 1st high-rise building in Sofia (126m) with tailor-made façade E99 is finished successfully

ETEM Bulgaria entered into a
Joint-Venture with Spanish group
Gestamp for the production of
Automotive products. Architectural
segment spins-off successfully and is
integrated in ETEM GR headquarters
in Athens Greece

## 2021

Startup of vertical powder coating line in Athens, Greece Installation of 2 new CNC machining lines.



2018

ETEM re-starts production in Athens, Greece

## 2020

Installation of 20MN extrusion line in Athens Greece.
Installation of two automatic CNC thermobreak assembly lines by Hermann Muller.

# IN 2021, ETEM TURNS 50 YEARS OLD. HALF A CENTURY OF HISTORY, QUALITY, AND INNOVATION IN ALUMINUM SYSTEMS.







1966

1969

1989

#### OTE Tower, Thessaloniki, Greece

The OTE Tower was designed by the architect Alexandros Anastasiadis in 1966 that stands 76 meters tall and features four floors. Today, other than its status as a modern monument of the city, opens up for events and exhibitions during the Thessaloniki International Fair.

## Tower of Athens, Athens, Greece

The tallest building in Greece that was founded in June 1969 and started operating in 1971, with a height of 103m. It's architects were loannis Vikelas and loannis Kympritis.

## La Grande Arche de la Défense, Paris, France

La Grande Arche de la Défense is a monument and an emblematic building in the French capital. French architect Paul Andreu Reitzel continued Johan Otto von Spreckelsen work until the monument was completed in 1989. The Grande Arche is in the approximate shape of a cube with a width, height and depth of 110 m.







2004

2008

## Archaeological Museum of Olympia, Olympia, Greece

One of the most important museums in Greece - exhibits the archaeological findings of Ancient Olympia. The Archaeological Museum of Olympia was opened in 1882 and it was the first museum in Greece, outside of Athens.

#### Hilton Athens, Athens, Greece

This luxury hotel located in the city center, was officially opened on April 20th, 1963, as Athens' first international hotel chain. In 2004 Hilton Athens was renovated by Greek architects Alexandros Tombazis and Charis Bougadelis.

#### Concert Hall Thessaloniki, Greece

Thessaloniki Concert Hall was designed by the Japanese architect Arata Isozaki and is a sample of modern architecture.









2014

2015

#### Carnagie Center Kiev, Ukraine

Multiuse building combining front commercial and high-rise residential towers. The project is 168 m height, keeping the title of the highest civil building in Ukraine, designed by the architect Babushkin S.

### National Museum of Contemporary Art Athens, Greece

The National Museum of Contemporary Art Athens (EMST) began its operation in 2000. Its permanent home is the former Fix brewery on Syngrou Ave. The renovation of the building (2014) is undertaken by the offices of 3SK Stylianidis Architects, I. Mouzakis and Associates Architects, Tim Ronalds Architects, while Kalliopi Kontozoglou participates as a partner of 3SK.

## 5th Pearl complex Odessa, Ukraine

Residential project with big volume of glazed surfaces (over 25 000 sq m).







2020

2022

## Bulgarian Development Bank, Sofia, Bulgaria

Bulgarian Development Bank is a historic building and cultural monument. The architect of the renovation project is architect Jeko Tilev.

## The Orbit Athens, Greece

The building that marks the beginning of a new era for Athens, is located in Kifissias Avenue and hosts offices of leading Greek companies. The project architectural design was done from "LC Architects" and "I & A Vikelas and Associate Architects".

## Sky Fort Sofia, Bulgaria

A high-rise office tower of 202 m is the second building, whose construction started after completion of the first tower Capital Fort (126 m)

Both projects are part of Sofia Capital City complex, and both with Etem's modular facade system E99.

The architects behind the dynamic architecture of Sofia Capital City are "A@A Architects".



## **ETEM TODAY**

Today, ETEM is one of the leading European companies, in the design, development and production of integrated, sustainable, and innovative aluminium architectural solutions, as well as tailor-made industrial profiles.

With more than 50 years of experience and continuous presence in the market, the company is committed to serve its customers with products and services of excellent quality, thus creating and maintaining long-term relationships and its reputation, based on trust, integrity, reliability and innovation.

The historic aluminum extrusion company, after the relocation of its entire production process from the Bulgarian plant to Greece, which was completed in May 2020, and after the investments in the Powder-Coating line, has achieved continuous increase in production.



#### **OUR VISION**

Our vision is to design, develop and manufacture integrated, sustainable and innovative aluminium architectural systems, by supplying added value products and systems that meet the highest requirements in terms of design, comfort, safety and energy efficiency.

The ultimate scope of ETEM is to satisfy the need for improving user's living experience.

#### **OUR MISSION**

Our mission is the establishment of ETEM as a reliable supplier of integrated aluminium architectural systems, as well as tailor made industrial profiles, maintaining our leading position, acknowledgment, and the respect throughout the entire customer base.

#### **OUR VALUES**

- / Customer oriented approach
- / Operational excellence
- / Human capital
- / Team spirit
- / Safety
- / Environmental protection &
- Sustainability
- / Respect & Integrity
- / Innovation



# 4 REASONS TO CHOOSE ETEM

History, Know-how & People

Subsidiary of the largest industrial group of Greece. The long history, the values and the distinctions of ETEM, ensure the continuation of a successful development in the future. Our vehicle, for more than 50 years, is the invaluable knowhow of our people.

Project Engineering

Support in every project (from design to implementation), through an experienced team of engineers & architects. ETEM's team can respond to any challenge with specialized or bespoke solutions







## Greece

Magoula, Athens | Production facilities, Warehouses Thessaloniki | Warehouses & Service Center Crete | Warehouses & Service Center



## Bulgaria

Sofia | Warehouses & Service Center



#### Serbia

Belgrade | Warehouse & Service Center



## Romania

Bucharest | Warehouses & Service Center Cluj | Warehouses & Service Center



#### Ukraine

Kiev | Commercial Office



## **GROWTH DRIVERS**

The increasing global demand for improved living conditions in terms of safety, aesthetics, comfort and energy-efficiency, constitute the main growth driver for aluminium architectural products.

Climate change initiatives & well being

Living experience & Energy efficiency

Eco-friendly & habitat improvement



## ΑΝΟΙΓΟΜΕΝΑ ΣΥΣΤΗΜΑΤΑ

# Opening systems

Η ευρεία γκάμα ανοιγόμενων συστημάτων της ΕΤΕΜ, προσφέρει πρακτικές λύσεις σε κάθε οικιακή ή εμπορική εφαρμογή.

Τα συστήματα αλουμινίου της ΕΤΕΜ μπορούν να επιλεχθούν ανάμεσα από διαφορετικούς συνδυασμούς, γεωμετρικά χαρακτηριστικά και επιδόσεις.

Η νέα γενιά ενεργειακά αποδοτικών συστημάτων, συνδυάζει την υψηλή αισθητική με την άνεση, αλλά και την ελάχιστη χρήση ορατών πλαισίων.

ETEM's extensive range of opening systems offers a practical solution for every residential or commercial application.

ETEM aluminum systems can be chosen between different combinations, geometries and performances.

The new generation of energy efficient systems combine elegance with comfort and minimum use of visible frames.

	E1000	E38	E45	E68	<b>EW70</b>	E75	E77
Σειρά / Series	Prime	Prime	Advance	Advance	Advance	Elite	Elite
Πλάτος κάσας / Frame width	40 mm	50 mm	60 mm	68 mm	70 mm	75 mm	109 mm
Διάκενο Υάλωσης /Glazing infill	4 ÷ 27 mm	6 ÷ 37 mm	6 ÷ 47 mm	12 ÷ 57 mm	17 ÷ 52 mm	14 ÷ 64 mm	έως / up to 55 mm
Θερμική αγωγιμότητα/ Thermal Transmittance Uw (W/m²K)	-	1,9	1,7	1,1	1,1	1,0	-





# E1000 prime SERIES

E1000 is an opening window system. It provides:

- wide range of profile options for inward and outward opening windows and doors;
- o solutions to several configurations;
- accommadation to single and double glazed infills, as well as non-transparent panels;
- O integration with shutter and rolling shutter.





## **TECHNICAL FEATURES**

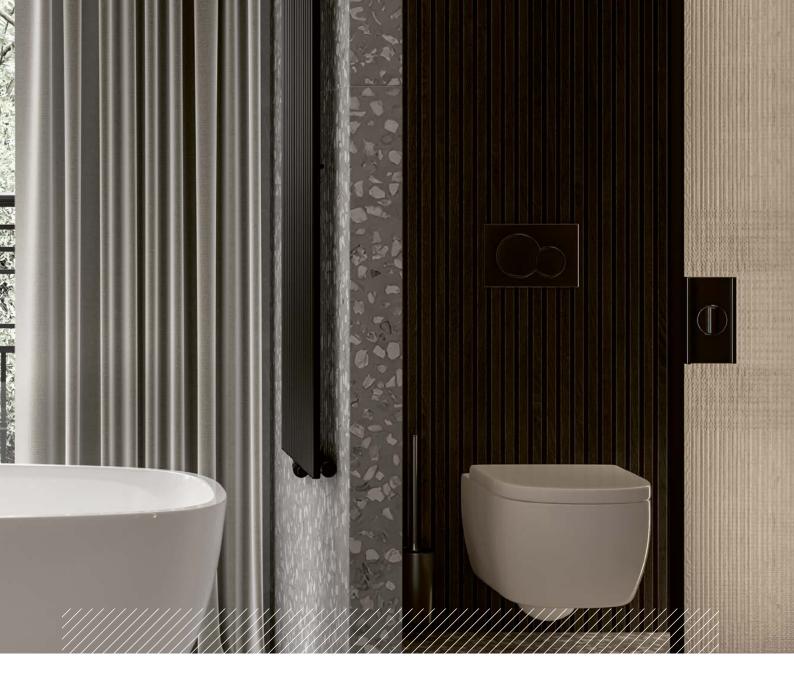
Frame width:	40 mm
Min. frame height:	54 mm
Min. casement height (f+v):	94 mm
Glazing infill:	4 ÷ 27 mm
Max. vent height:	2.200 mm
Max. vent width:	1.400 mm
Max. vent weight:	100 kg



# E38 prime SERIES

E38 is a basic opening window and door system with thermal break. It provides:

- o cost effective solutions;
- wide range of profile options for inward opening windows and doors;
- o solutions to several configurations;
- O accommodation to glazed infills as well as non-transparent panels;
- either PVC-groove or Euro-groove mechanism;
- o integration with shutter and rolling shutter.





#### **TECHNICAL FEATURES**

Frame width:	50 mm
Frame height:	58 mm
Casement height (f+v):	127 mm
Glazing infill:	6 ÷ 37 mm
Max. vent height:	2.300 mm
Max. vent width:	1.600 mm
Max. vent weight:	140 kg
Thermal transmittance Uf:	≥ 2,6 W/(m <sup>2</sup> K)



## E45 advance SERIES

E45 is an opening window and door system with thermal break. It provides:

- wide range of profile options for inward and outward opening windows and doors;
- o solutions for several configurations;
- o accommodation to glazed infills as well as non-transparent panels;
- special hidden vent solution;
- either PVC-groove or Euro-groove mechanism;
- integration with shutter and rolling shutter.





## **TECHNICAL FEATURES**

Frame width:	60 mm
Min. frame height:	45 mm
Min. casement height (f+v):	71 mm / 83 mm
Glazing infill:	6 ÷ 47 mm
Max. vent height:	2.300 mm
Max. vent width:	1.600 mm
Max. vent weight:	140 kg
Thermal transmittance $U_f$ :	≥ 1.9 W/(m <sup>2</sup> K)



# E68 advance SERIES

E68 is a high end opening window system with thermal break. It provides:

- O a wide range of profile options for inward opening windows;
- o solutions to several configurations;
- o accommodation to glazed infills as well as non-transparent panels;
- either PVC-groove or Euro-groove mechanism;
- special hidden vent and ventilated vent solutions;
- O integration with shutter and rolling shutter.





## **TECHNICAL FEATURES**

68 mm
59 mm
73 / 107 mm
12 ÷ 57 mm
2.700 mm
1.400 mm
130 kg
$\geq 1.7 \text{ W/(m}^2\text{K)}$



## EW70 advance SERIES

EW70 is a new generation opening window system with thermal break. It provides:

- wide range of profile options for inward opening windows;
- o solutions to several configurations;
- material optimal solutions with exceptionally high testing performances;
- o accommodation to glazed infills as well as non-transparent panels;
- special hidden vent solution;
- o integration with shutter and rolling shutter.





#### **TECHNICAL FEATURES**

Frame width:	70 mm
Min. frame height:	47 mm
Casement height(f+v):	74 / 95 mm
Glazing infill range:	17 ÷ 52mm
Max. vent height:	2.300 mm
Max. vent width:	1.400 mm
Max. vent weight:	130 kg
Thermal transmittanc $U_f$ :	≥ 1.4 W/(m <sup>2</sup> K)



## E75 elite SERIES

E75 is a heavy duty opening window system with thermal break. It provides:

- wide range of profile options for inward & outward opening windows & doors;
- o solutions to several configurations;
- o accommodation to glazed infills as well as non-transparent panels;
- o special hidden vent solution;
- O integration with shutter and rolling shutter.





Frame width:	75 mm
Min. frame height:	59 mm
Min. casement height (f+v):	107 mm
Glazing infill:	14 ÷ 64 mm
Max. vent height:	2.700 mm
Max. vent width:	1.400 mm
Max. vent weight:	180 kg
Thermal transmittance U <sub>f</sub> :	≥ 1.2 W/(m <sup>2</sup> K)





- E77 is a bullet resisting opening window system with thermal break.lt provides:
- o inward opening window solutions;
- options for fixed and openable configurations;
- o accommodation to glazed infills as well as non-transparent panels;
- special hidden vent solution.





Frame width:	80 mm
Min. frame height:	101 mm
Min. casement height (f+v):	111 mm
Glazing infill:	up to 55 mm
Max. vent area:	2 m <sup>2</sup>
Max. vent weight:	300 kg

### SLIDING SYSTEMS

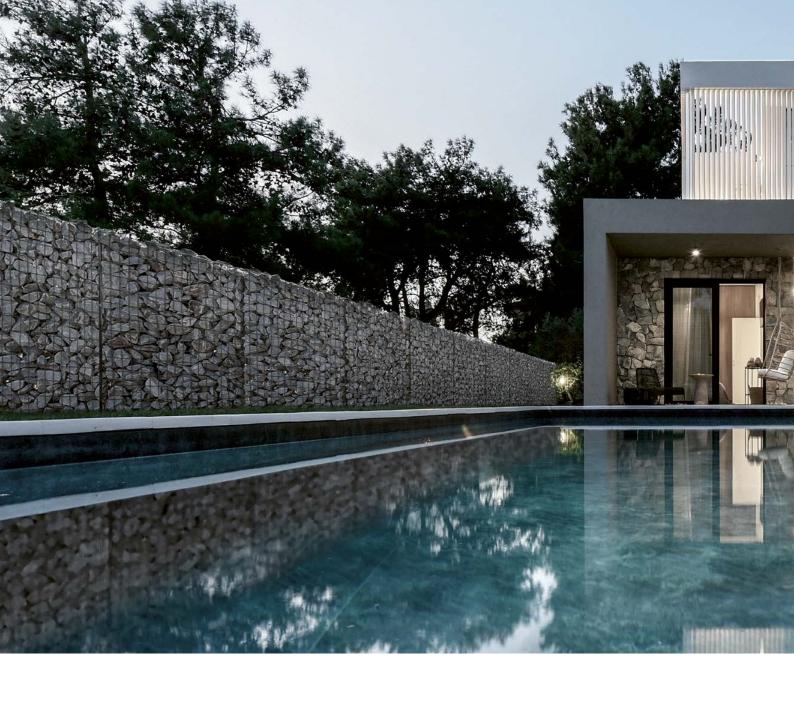
ETEM's sliding systems are an innovative way to improve your living experience!

Our systems combine the highest standards in functionality and thermal insulation.

The possibilities of installation in large openings ensure infinite view with ultimate performance.

	ES320	E32	<b>ES38</b>	E50	ES500	<b>ES70</b>
Series	Prime	Prime	Advance	Advance	Advance	Elite
Max. sash height	2.300 mm	2.300 mm	2.400 mm	3.300 mm	3.300 mm	3.300 mm
Sash width	32 mm	32 mm	38 mm	50 mm	50 mm	70 mm
Thermal Transmittance Uw (W/m²K)	-	1,9	1,8	1,6	-	1, 0





### ES320 prime SERIES

ES320 is the basic sliding system, capable to support a large variety of solutions. It provides:

- O different window configurations;
- wide range of profile options;
- O multiple types of either locking mechanisms or handles;
- o stainless steel rail;
- o integration of flyscreen and/or shutter.





Sash width:	32 mm
Min. sash height:	82 mm
Rail height:	31 mm
Interlock width:	85 mm
Glazing infill:	10 ÷ 19 mm
Max. sash width:	2.100 mm
Max. sash height:	2.300 mm
Max. sash weight:	90 kg



# E32 prime SERIES

E32 is the basic sliding window system with thermal break, developed to support a large variety of solutions. It provides:

- O different window configurations;
- wide range of profile options;
- O multiple types of either locking mechanisms or handles;
- o narrow interlock option;
- O stainless steel rail, ensuring smooth sliding;
- o integration with flyscreen and/or shutter.





Sash width:	32 mm
Sash height:	82 mm
Rail height:	31 mm
Interlock width:	90 mm
Glazing infill:	18 ÷ 22 mm
Max. sash width:	1.600 mm
Max. sash height:	2.300 mm
Max. sash weight:	90 kg
Thermal transmittance $U_f$ :	≥ 2,9 W/(m <sup>2</sup> K)



## ES38 advance SERIES

ES38 is a sliding window system with thermal break, capable to support a large variety of solutions. It provides:

- O different window configurations;
- wide range of profile options;
- O multiple type of either locking mechanisms or handles;
- O stainless steel rail, ensuring smooth sliding;
- o integration with flyscreen and/or shutter.





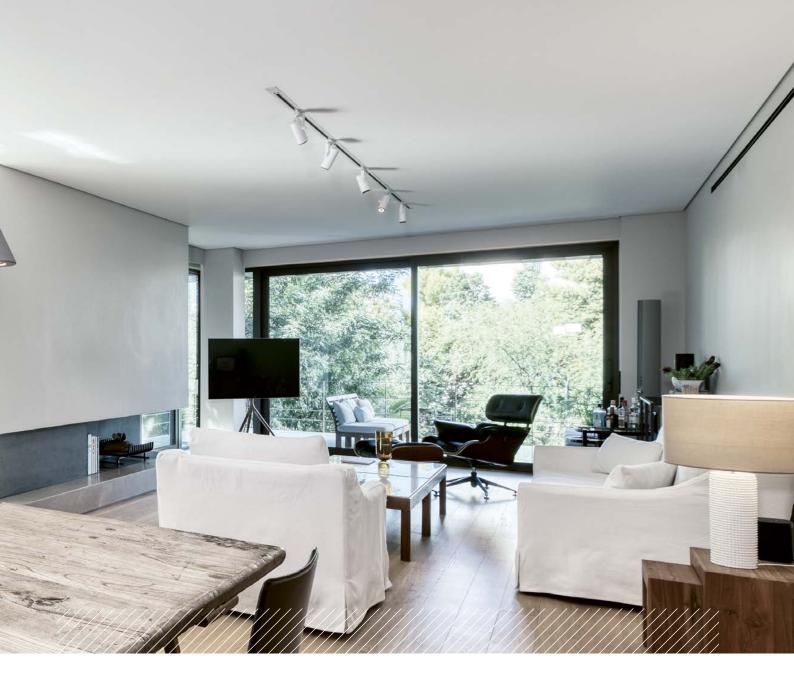
Sash width:	38 mm
Min. sash height:	79 mm
Rail height:	32 / 44 mm
Interlock width:	53 / 86 mm
Glazing infill:	22 ÷ 26 mm
Max. sash width:	2.000 mm
Max. sash height:	2.400 mm
Max. sash weight:	130 kg
Thermal transmittance $U_f$	≥ 2,9 W/(m <sup>2</sup> K)



### E50 advance SERIES

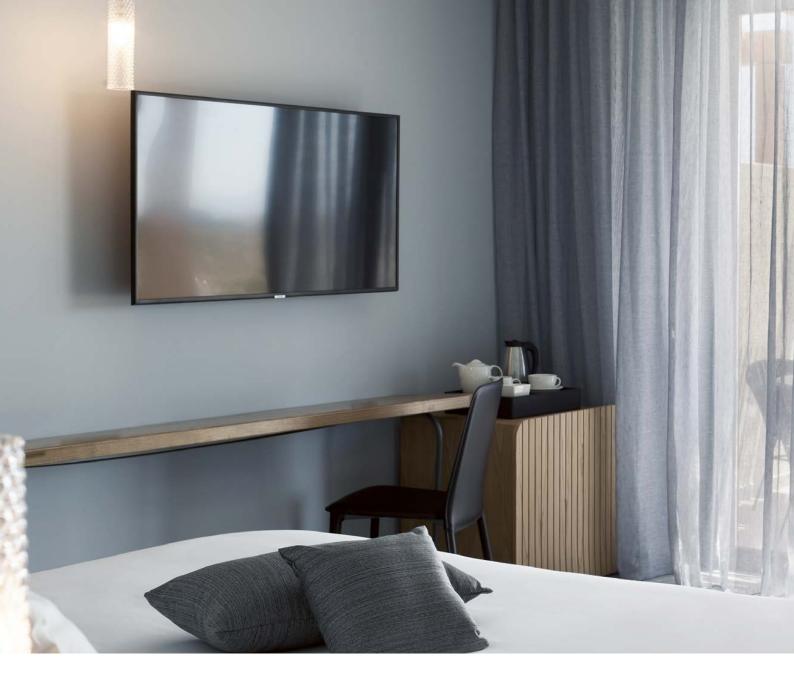
E50 is a high end sliding window system with thermal break, designed to support a large variety of solutions. It provides:

- different window configurations;either lift & slide or sliding mechanisms;
- O multiple types of either locking mechanisms or handles;
- o stainless steel rail;
- o flat rail option;
- o narrow interlock option;
- o integration with flyscreen and/or shutter.





Sash width:	50 mm
Min. sash height:	80 mm / 92 mm
Rail height:	25 mm / 45 mm
Interlock width:	36 mm / 112 mm
Glazing infill:	6 ÷ 41 mm
Max. sash width:	3.300 mm
Max. sash height:	3.300 mm
Max. sash weight:	200 kg / 400 kg
Thermal transmittance $U_f$ :	≥ 2,0 W/(m <sup>2</sup> K)



### ES500 advance SERIES

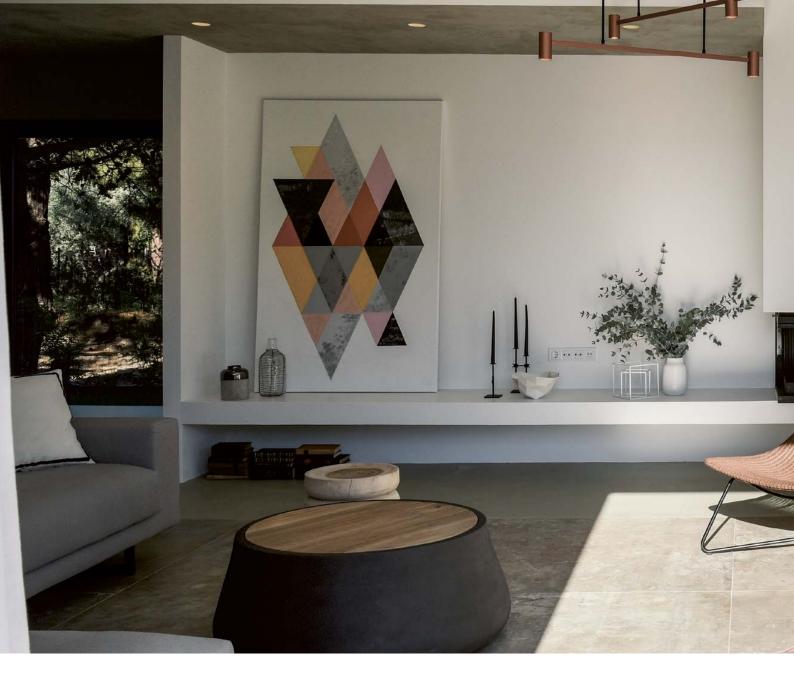
ES500 is a heavy duty sliding system, designed to support a large variety of solutions. It provides:

- o different window configurations;
- either lift & slide or sliding mechanisms;
- o multiple types of either locking mechanisms or handles;
- onarrow interlock option;
- o stainless steel rail;
- o integration with flyscreen.





Sash width:	50 mm
Sash height:	92 mm
Rail height:	45 mm
Interlock width:	65 mm / 112 mm
Glazing infill:	6 ÷ 41 mm
Max. sash width:	3.300 mm
Max. sash height:	3.300 mm
Max. sash weight:	200 kg / 400 kg



## ES70 elite SERIES

ES70 is a heavy duty sliding window system with thermal break, developed to support a large variety of solutions. It provides:

- O different window configurations;
- solutions to extremely thick glazing, heavy weights or large openings, ensuring unique operation;
- heavy wind load resistance;
- O lift & slide mechanism;
- O stainless steel rail, ensuring smooth sliding;
- oflat rail option;
- o narrow interlock option;
- o integration with flyscreen.





Sash width:	70 mm
Sash height:	103 mm
Rail height:	25 mm / 48 mm
Interlock width:	54 mm / 113 mm
Glazing infill range:	25 ÷ 52 mm
Max. sash width:	3.300 mm
Max. sash height:	3.300 mm
Max. sash weight:	440 kg
Thermal transmittance $U_f$ :	≥ 1,7 W/(m <sup>2</sup> K)

### **DOORS**

ETEM door systems have been especially designed to meet the needs for wide openings. They provide exceptional functionality and elegance to any installation.

They ensure durability and safety, combined with a minimal and modern design.

The door systems can meet the requirements of every contemporary project, thanks to their technical features.

	ED630	ED68	ED75
Series	Advance	Advance	Elite
Frame width	63,5 mm	68 mm	75 mm
Glazing infill	11 ÷ 43 mm	13 ÷ 48 mm	15 ÷ 55 mm





## ED630 advance SERIES

ED630 is an openable door system ideal for large doors. It provides:

- full range of typologies;
- flush surface between frame and doorleaf;
- O exceptionally high burglar resistance performance;
- o integration into curtain wallings.





Frame width:	63,5 mm
Frame height:	69 mm
Section height (f+I):	141 mm
Glazing infill range:	11 ÷ 43 mm
Max. sash width:	2.800 mm
Max. sash height:	1.200 mm
Max. sash weight:	200 kg



# ED68 advance SERIES

ED68 is a door system with thermal break, especially designed to meet large entrance door needs. It provides:

- full range of typologies;
- O flush surface between frame and doorleaf;
- optional central gasket;
- O implementation with or without threshold or drop down seal;
- O integration into curtain wallings.





Frame width:	68 mm
Frame height:	75 mm
Section height (f+I):	141 mm
Glazing infill:	11 ÷ 43 mm
Max. height:	2.800 mm
Max. width:	1.100 mm
Max. vent weight:	200 kg
Thermal transmittance $U_f$	$\geq 1,4 \text{ W/(m}^2\text{K)}$



### ED75 elite SERIES

ED75 is an advanced door system with thermal break, developed to support large entrance doors. It provides:

- o full range of typologies;
- flush surface between frame and doorleaf;
- especially designed polyamides to ensure exceptional operation under extreme temperature differences;
- O implementation with or without threshold or drop down seal;
- O integration into curtain wallings.





75 mm
75 mm
153 mm
15 ÷ 55 mm
3.200 mm
1.300 mm
200 kg
$\geq$ 1,1 W/(m <sup>2</sup> K)

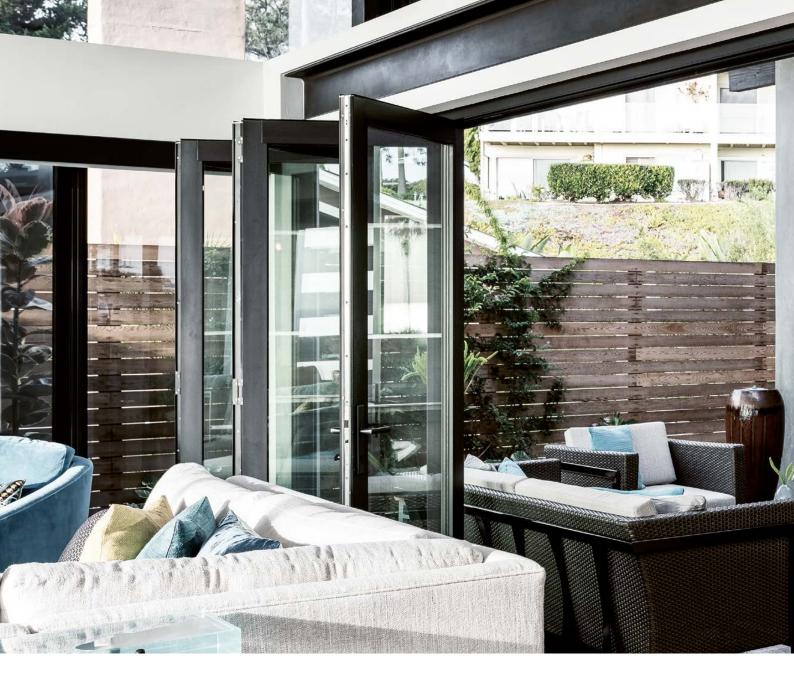
# SLIDE AND FOLDING SYSTEMS

ETEM slide and folding window systems are designed to provide solutions for wide openings, offering flexibility and security.

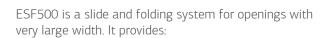
The lean profiles design and the large variety of bottom rails meet every aesthetic need. The systems can be integrated into many projects, such as residences, coffee shops, restaurants or hotels, creating an unimpeded indoor and outdoor transition.

	ESF500	E39
Series	Advance	Advance
Vent width	50 mm	50 mm
Glazing infill	6 ÷ 34 mm	6 ÷ 34 mm
Thermal transmittance Uw (W/m²K)	-	1,8

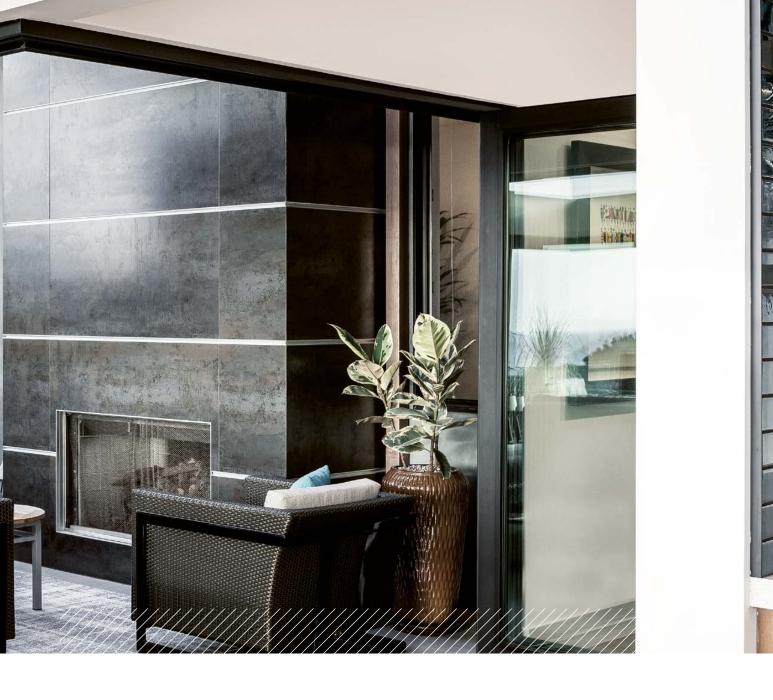




### ESF500 advance SERIES



- O flush surface between the frame and the sash;
- O stainless steel rail, ensuring smooth sliding;
- large variety of bottom rails that are either floor integrated or external, depending on the requirement.

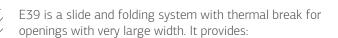




Vent width:	50 mm
Vent height:	65 mm
Top rail height:	90 mm
Glazing infill range:	6 ÷ 34 mm
Max. vent width:	1.100 mm
Max. vent height:	2.800 mm
Max. vent weight:	110 kg



### E39 advance SERIES



- O flush surface between the frame and the sash;
- O stainless steel rail, ensuring smooth sliding;
- large variety of bottom rails that are either floor integrated or external, depending on the requirement.





Vent width:	50 mm
Vent height:	65 mm
Top rail height:	90 mm
Glazing infill range:	6 ÷ 34 mm
Max. vent width:	1.100 mm
Max. vent height:	2.800 mm
Max. vent weight:	110 kg
Thermal transmittance $U_f$ :	$\geq$ 2,7 W/(m <sup>2</sup> K)

### **SHADING SYSTEMS**

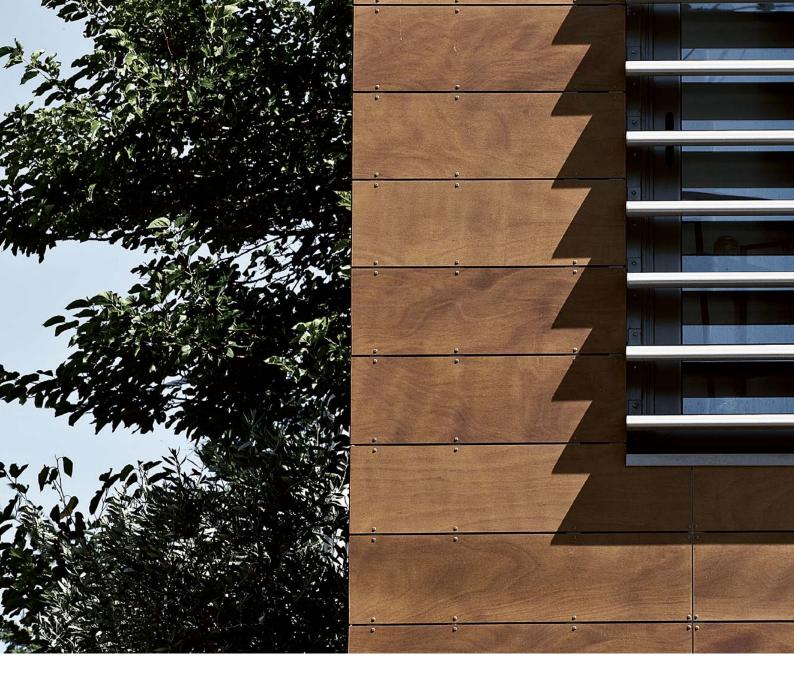
One of the most important challenges facing modern buildings is the right use of shading systems with the ultimate goal of proper management of natural light.

Through the various solutions offered by ETEM, you will find the right systems that allow day light to enter providing high energy efficiency, interior comfort and modern design.

	E66
Series	Prime
Louver width range:	150 mm ÷ 600 mm
Inertia louvers (lx):	up to 316 cm <sup>4</sup>
Inertia louvers (ly):	up to 1.790 cm <sup>4</sup>

	EL20
Series	Advance
Max. rotation angle:	120°
Max. length:	5.000 mm
Max. width	4.500 mm





## E66 prime SERIES

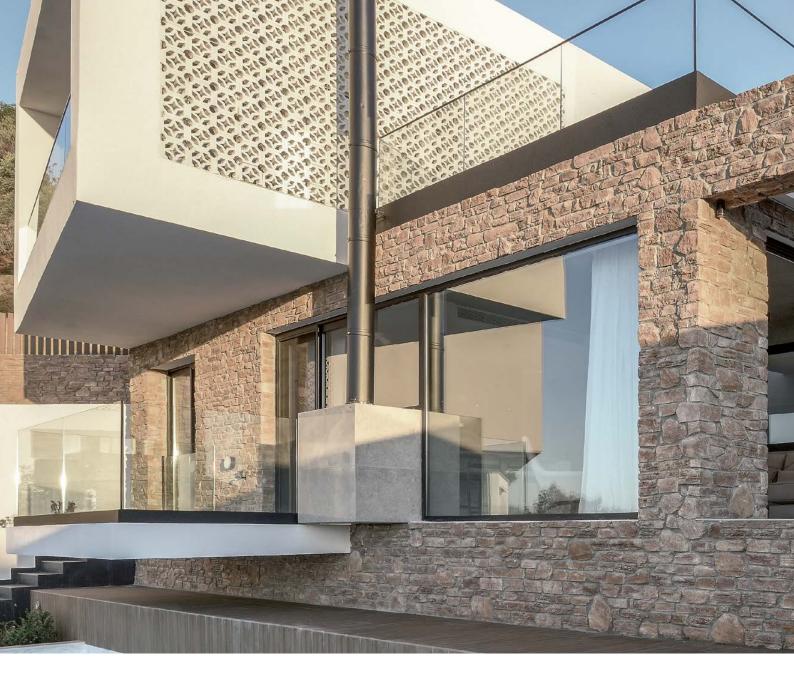
E66 is a solar shading solutions' system. It provides:

- several louvres designs;
- O solutions to multiple shading spans;
- o options for fixed, rotating or retractable louvres;o wide range of fixation methods.





Louver width range:	150 mm ÷ 600 mm
Inertia louvers (lx):	up to 316 cm <sup>4</sup>
Inertia louvers (ly):	up to 1.790 cm <sup>4</sup>
Louver blade type:	rectangular, elliptical, Z-shape
Installation:	vertical or horizontal
Angle:	fixed or adjustable



## EL20 advance SERIES

EL20 is a bioclimatic pergola system. It provides:

- O linear surfaces;
- absolute shading and drainage system;solutions to large spans.





Column dimensions:	120 mm x 120 mm
Basic beam dimensions:	80 mm x 198 mm
Transverse beam dimensions:	120 mm x 198 mm
Louver width:	220 mm / 238 mm
Max. rotation angle:	120°
Max. length:	5.000 mm
Max. width:	4.500 mm

# SUPPLEMENTARY PRODUCTS

ETEM's supplementary systems ideally improve the aesthetics of any building.

Our partition walls and glass balustrades systems are developed to fit any project, providing unrestricted views with minimal structural interference.

They combine functionality and safety, while at the same time meeting all architectural requirements.





### EP30 advance SERIES

EP30 is an office partitioning system. It provides:

- O full height glazed or transom solutions;
- O accommodation to several single glazed infills as well as non-transparent panels, with complementary insulation;
- o integration with venetian blinds in the cavity;
- O incorporation of cable infrastructure (power, telephone, network);
- open space configurations.





System width:	80 mm
Max. module width:	1.200 mm
Max. module height:	2.800 mm
Infill thickness range:	4 ÷ 10 mm
Max weight (door):	120 kg



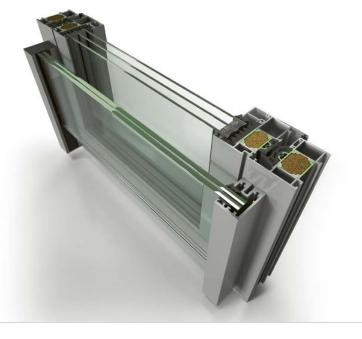
### EB48 advance SERIES



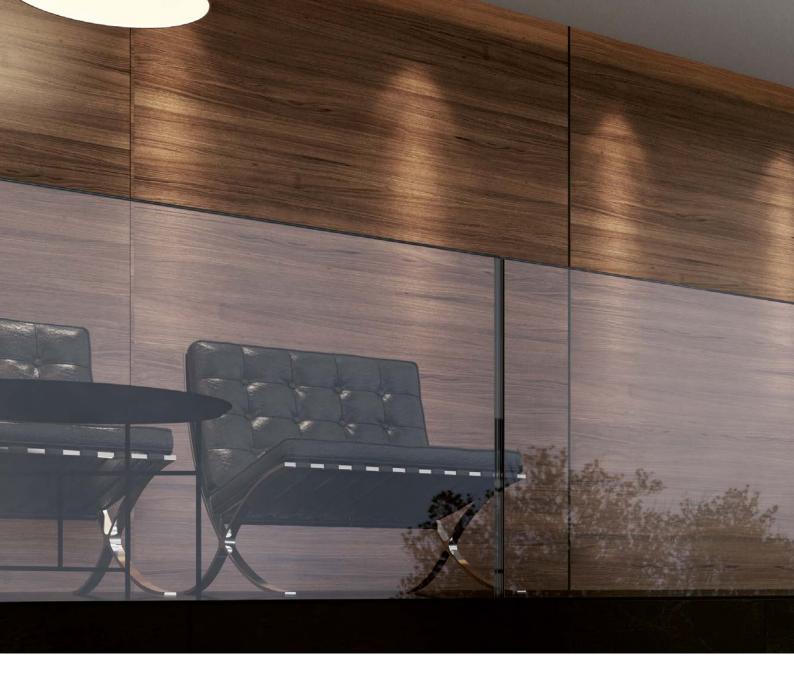
EB48 is an add-on glass balustrade system for door height window systems. It provides:

- O accommodation to different glass infill compositions;
- easy attachment on any openable system;
- the highest possible safety to the user.





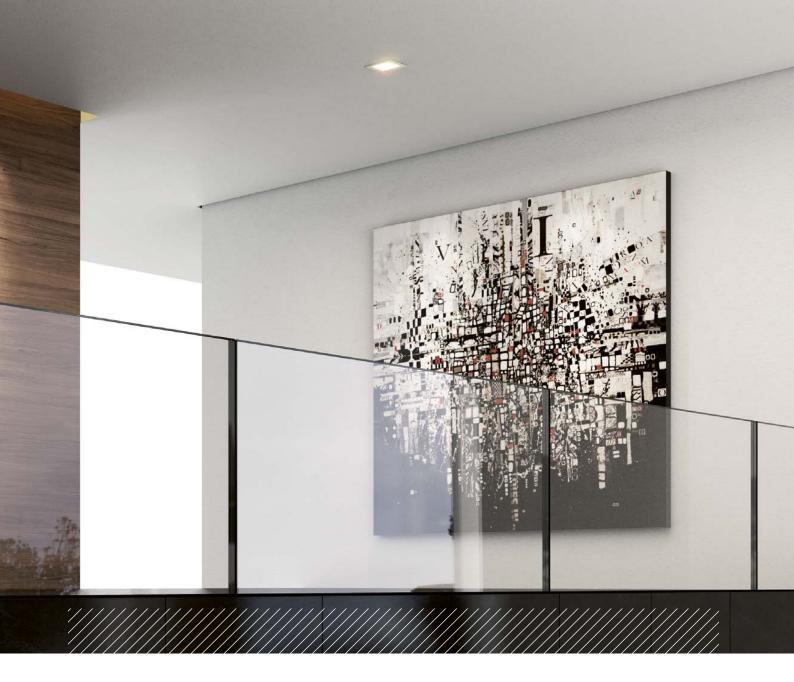
System width:	33 mm
System depth:	48 mm
Glazing infill:	up to 17.5 mm
Max. width:	1.500 mm
Max. height:	1.200 mm



## EB46 advance SERIES

EB46 is a frameless glass balustrade system, ideal for areas susceptible to overcrowding. It provides:

- O optimal materialized solutions;
- accommodation to various types of infills;
  fully integration into the floor level, featuring a flush ground result.





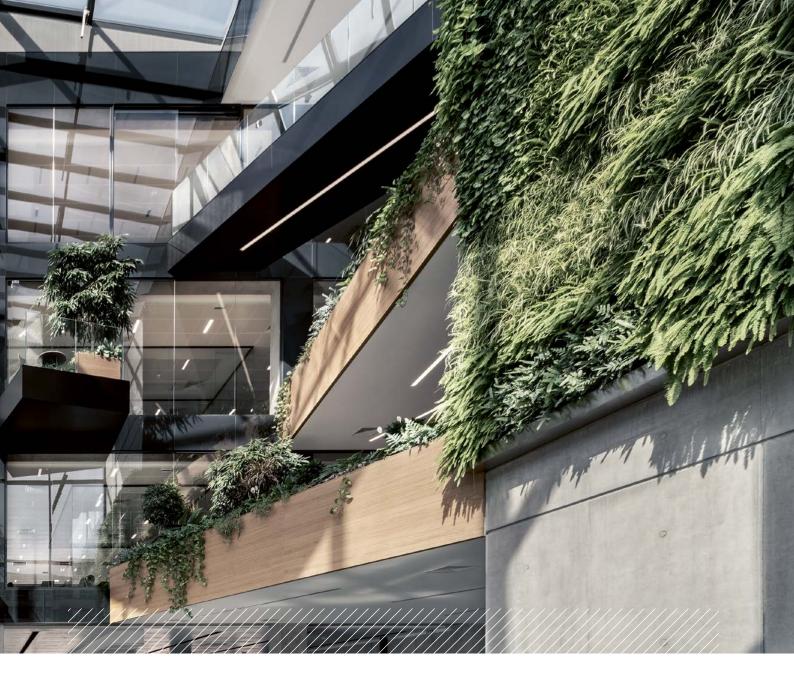
Base width:	46 mm
Base height:	100 mm
Glazing infill:	17,5 mm / 21,5 mm



## EB49 advance SERIES

EB49 is a light frameless glass balustrade system, ideal for areas with limited crowd concentration. It provides:

- O design in modern, straight lines;
- accommodation to various types of infills;
- oprotection against stepping on bases;
- installation on or embedded to the floor level.





Base width:	49 mm
Base height:	98 mm
Glazing infill:	13,5 mm / 17,5 mm





## EB50 advance SERIES

 $\ensuremath{\mathsf{EB50}}$  is a frameless glass balustrade system, ideal for areas susceptible to overcrowding. It provides:

- O design in modern, straight lines;
- accommodation to various types of infills;
- o multiple anchoring methods;
- O protection against stepping on bases;
- installation on or embedded to the floor level.





Base width:	50 mm
Base height:	114 mm
Glazing infill:	17,5 mm / 21,5 mm



## EB62 advance SERIES



EB62 is a frameless glass balustrade system, designed to be installed as parapet or floor base with low-height glass infill. It provides:.

- O design in modern, straight lines;
- optimal materialized solutions;
- o accommodation to various types of infills;





Base width:	62 mm
Base height:	83 mm
Glazing infill:	13,5 mm / 17,5 mm









# CURTAIN WALL SYSTEMS

ETEM's curtain wall systems provide solutions to every contemporary architectural need, delivering functionality and design flexibility.

They are suitable for the construction of buildings with glass facades, combining maximum transparency, brightness with high performance.

	E85	EF50	E8000
System basic width:	50 mm - 60 mm	50 mm	60 mm
Min./max. system basic depth:	50 mm / 230 mm	64 mm / 249 mm	50 mm / 170 mm
Glazing infill range	24 ÷ 42 mm	8 ÷ 36 mm	6 ÷ 43 mm
	EU100	E99	
System basic width:	85 mm / 100 mm	99 mm	
System basic depth	100 mm	222 mm	
Infill thickness range:	6 ÷ 40 mm	23 ÷ 56 mm	
	E86		
Receptor width:	152mm / 6"		
Receptor height:	55mm / 21/8"		





### E85 advance SERIES

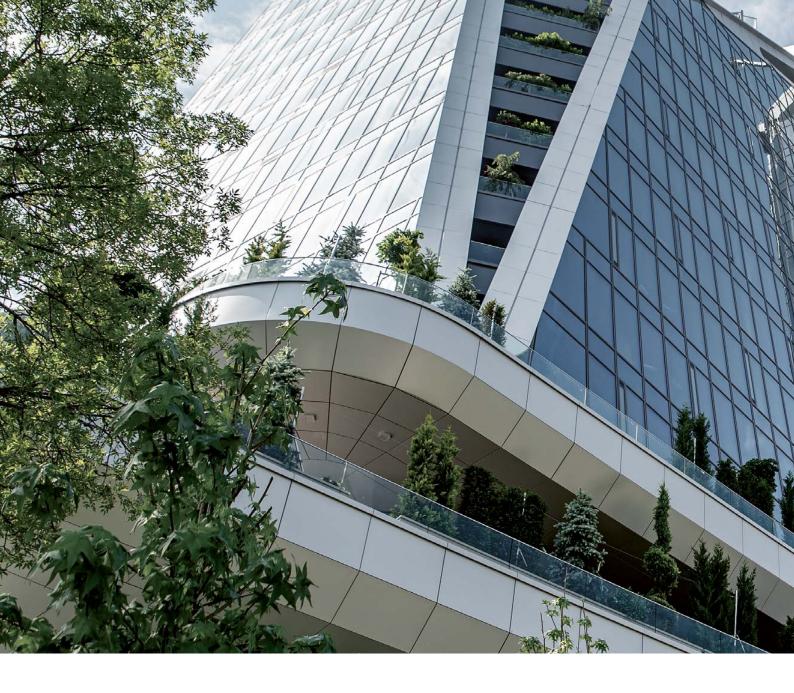
E85 is a 50mm curtain walling system, capable to offer a wide variety of solutions. It provides:

- O stick or bonded glazed (widely known as structurally glazed) options;
- O accommodation to all typical infill thicknesses (single, double, triple glazing and panels);
- Solutions to sloped constructions;
- O integration with projected constructions, such as external shading;
- O burglar / bullet resistance;
- wide range of project profiles for custom applications;
- O incorporation of ETEM systems as infills.





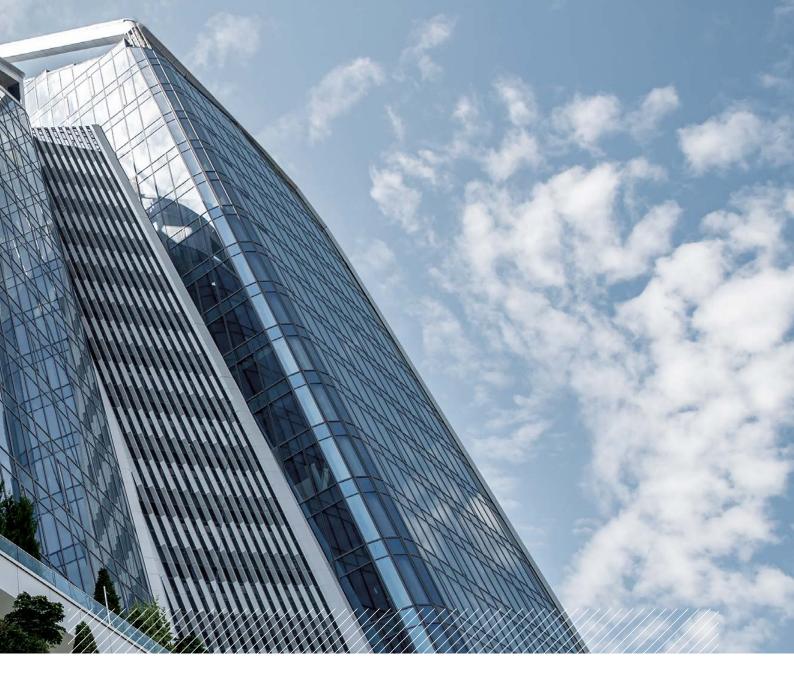
50 mm - 60 mm
50 mm / 230 mm
24 ÷ 42 mm
1.000 kg
up to 2.162 cm <sup>4</sup>
up to 399 cm <sup>4</sup>
up to 43 cm <sup>4</sup>
≥ 1.6 W/(m <sup>2</sup> K)



### EF50 advance SERIES

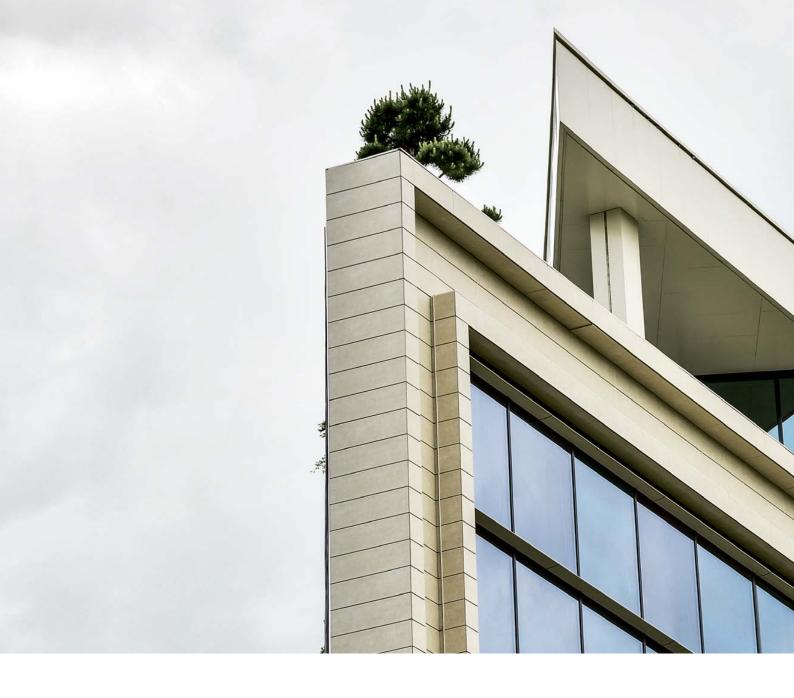
EF50 is a new generation 50 mm curtain walling system. It provides:

- O stick or bonded glazed (widely known as structurally glazed) options;
- accommodation to typical infill thicknesses (single, double glazing and panels);
- o integration with projected constructions, such as external shading;
- O material optimal solutions with exceptionally high testing performances;
- wide range of project profiles for custom applications;
- o incorporation of ETEM systems as infills.





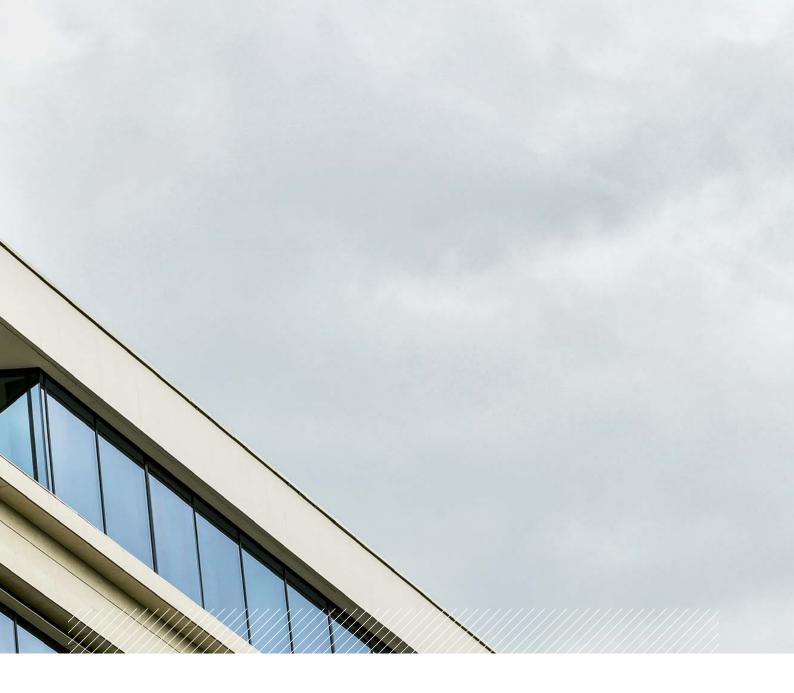
50 mm
64 mm / 249 mm
8 ÷ 36 mm
500 kg
up to 1.411 cm <sup>4</sup>
up to 926 cm <sup>4</sup>
up to 60 cm <sup>4</sup>
≥ 1.0 W/(m <sup>2</sup> K)

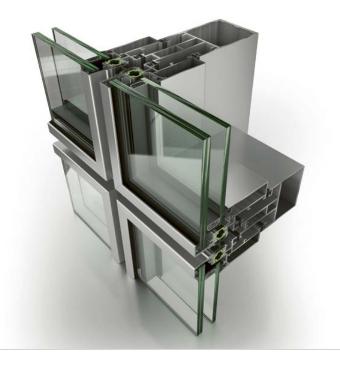


### E8000 advance SERIES

E8000 is a cassette curtain walling system. It provides:

- O both semi-structural and structural options;
- accommodation to a large range of infill thicknesses (single, double, triple glazing and panels);
- o integration with projected constructions, such as external shading;
- incorporation to projected or parallel projected infills that are using the same cassette profile for a harmonised view as well as doors;
- O both thermally broken and non-thermally broken solutions.





System basic width:	60 mm
Min./max. system basic depth:	50 mm / 170 mm
Glazing infill range:	6 ÷ 43 mm
Max. weight:	200 kg
Inertia mullions ( $I_x$ : wind load):	up to 1.326 cm <sup>4</sup>
Inertia transoms ( $I_x$ : wind load):	up to 129 cm <sup>4</sup>
Inertia transoms ( $I_y$ : glass load):	up to 33 cm <sup>4</sup>
Thermal transmittance $U_f$ :	≥ 1.9 W/(m <sup>2</sup> K)



### EU100 advance SERIES



EU100 is a basic unitised curtain walling system, ideal for humid and hot climates. It provides:

- solutions with visible and non-visible (bonded glazing, widely known as structurally glazed system) aluminium on the external surface;
- accommodation to either single glazed or double glazed infills as well as non-transparent panels;
- O integration with projected constructions, such as external shading;
- O easy installation with minimum on-site human effort.





System basic width:	85 mm / 100 mm
System basic depth:	100 mm
Infill thickness range:	6 ÷ 40 mm
Max. weight:	300 kg
Typical module dimensions:	3.800 mm x 1.500 mm

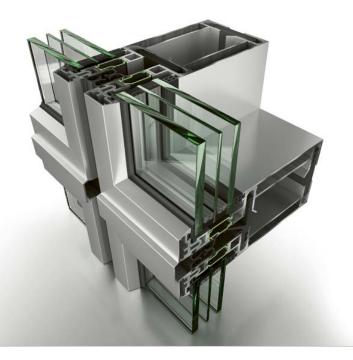


### E99 advance SERIES

E99 is a superior unitised curtain walling system, recommended for high rise buildings. It provides:

- solutions with visible and non-visible (bonded glazing, widely known as structurally glazed system) aluminium on the external surface;
- o accommodation to glazed infills as well as non-transparent panels;
- O integration with projected constructions, such as external shading;
- O easy installation with minimum on-site human effort;
- O ideal for areas with intense seismic activity.





System basic width:	99 mm
System basic depth:	222 mm
Infill thickness range:	23 ÷ 56 mm
Max. weight:	1.200 kg
Inertia mullions ( $I_x$ : wind load):	up to 571 cm <sup>4</sup>
Inertia transoms (I <sub>x</sub> : wind load):	up to 1.090 cm <sup>4</sup>
`X /	up to 1.030 a11
Inertia transoms (I <sub>y</sub> : glass load):	up to 253 cm <sup>4</sup>



# E86 advance SERIES

E86 is a highly performing window wall system. It provides:

- $\ensuremath{\textsc{O}}$  exceptionally high performance results, respecting the most severe tests;
- O accommodation to glazed infills as well as non-transparent panels;
- O easy installation with minimum on-site human effort, from the inside;
- O incorporation of ETEM systems as infills.





Receptor width:	152 mm / 6"
Receptor height:	55 mm / 2 1/8"
Min. section height (r+f):	75 mm / 3"
Infill thickness range:	up to 48 mm
Max. weight:	600 kg
Thermal transmittance $U_f$ :	$\geq$ 1,0 W/(m <sup>2</sup> K) $\geq$ 0,19 Btu/(hr ft <sup>2</sup> F)

# VENTILATED FAÇADE SYSTEMS

ETEM's ventilated façade systems are part of the external envelope of the buildings allowing quick, secure and cost-effective installation of different cladding materials.

The systems are based on the principle of natural ventilation, which is achieved through an air gap between the façade materials and the building's walls.





### E97 BRAVO advance SERIES



E97 BRAVO is a ventilated façade subframing system, ideal for large and flat surfaces, cladded with metal sheets (e.g. etalbond). It provides:

- O solutions with hangers which allow adjustments to three dimensions;
- O tolerances that allow the thermal expansion movements;
- fast and secure installation.





## **TECHNICAL FEATURES**

Cladding material thickness range:	0,7 mm ÷ 4 mm
Max. cladding material weight:	$8 \text{ kg} / \text{m}^2$
Mounting method:	hangers, slots, rivets
Max. span length (height):	1.500 mm
Max. span length (width):	6.000 mm
Distance range from the wall:	40 mm ÷ 270 mm



## E97 VARIO advance SERIES

E97 VARIO is a ventilated façade subframing system for cladding with horizontal and vertical joints. It provides:

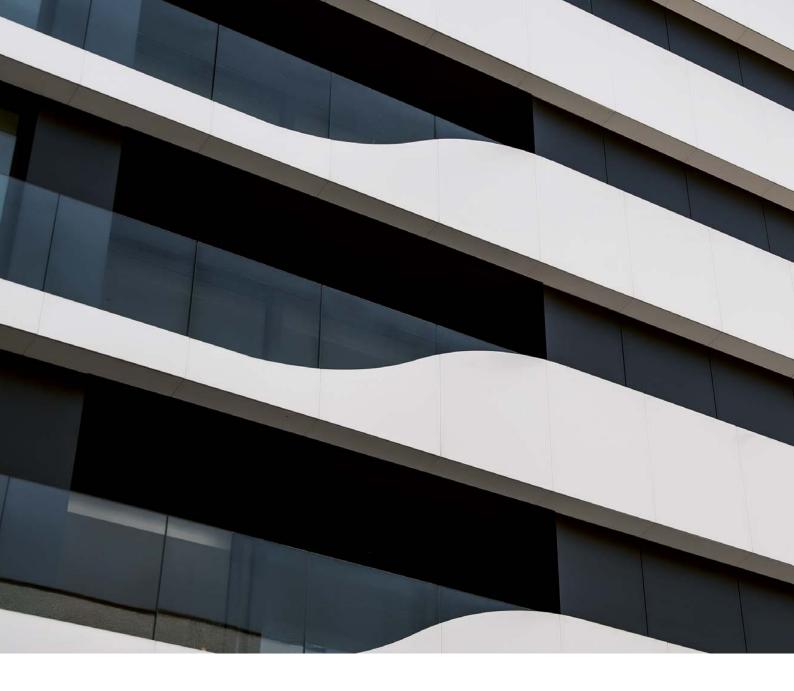
- solutions for a wide range of cladding materials, such as lamellas, ceramic tiles, glass, HPL, cement, GFRC etc;
- O mounting methods that ensure rigidity on the cladding elements;
- resistance to weather conditions;
- O fast and accurate installation.





## **TECHNICAL FEATURES**

Cladding material thickness range:	4 mm ÷ 12 mm
Max. cladding material weight:	20 kg / m <sup>2</sup>
Mounting method:	rivets, clips, adhesives, slots
Max. span length (height):	2.250 mm
Max. span length (width):	4.100 mm
Distance range from the wall:	40 mm ÷ 270 mm



## E97 FORTE advance SERIES

E97 FORTE is a ventilated façade subframing system for cladding heavy materials, such as marbles, stones or light transmitting concrete. It provides:

- O non visible holding elements;
- easy access for maintenance purposes;
- fast and easy installation.





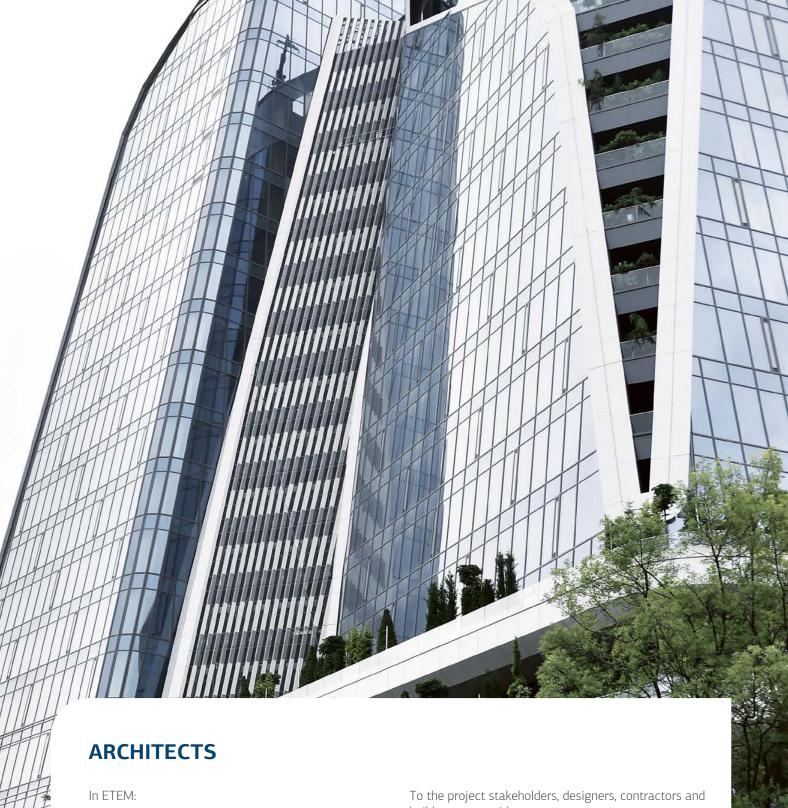
## **TECHNICAL FEATURES**

≥ 10 mm
90 kg / m²
undercut anchors, pins
1850 mm
4100 mm
40 mm ÷ 270 mm

# WE SUPPORT YOU IN EVERY STEP

Our upgraded solutions are the ideal choice for environmentally friendly buildings characterized by high energy performance, while the excellent quality support services guarantee the best and most productive result in the whole life cycle of our products. The expertise of our human resources, combined with the respect and support of each professional as a partner, is a primary goal of ETEM. The goal of our associates is to provide solutions throughout the life cycle of the project.



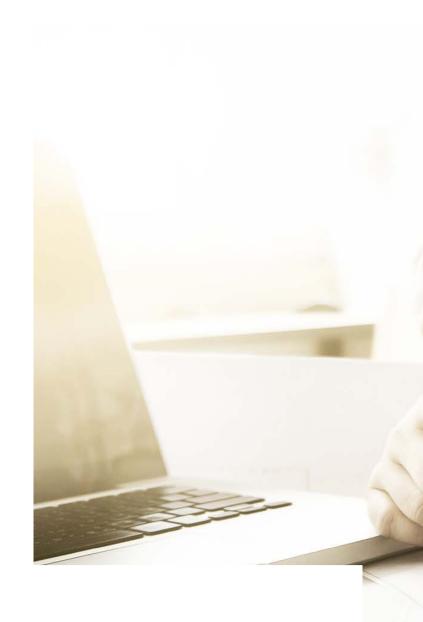


/ we work closely with each architect to understand his needs, desires and requirements.

- / we propose the best solutions at all levels and we study how the systems that are specified will work harmoniously with the other elements - parts of the project
- / we analyze a project, identify its current and future needs, and provide solutions developed specifically to meet technical, operational and design requirements.

builders, we provide:

- / Complete documentation and support in the preparation of the submission files,
- / Specification articles, technical description and invoice articles.
- / Support in Value Engineering processes with alternative proposals finding balances between aesthetics, functionality, performance and final value of solutions.
- / Application details and solutions in an AUTOCAD database
- / Access to the BIM libraries of the systems
- / Environmental Product Declaration



## **MANUFACTURERS**

Everything you need to know about the technical assistance and distribution network of FTEM

In ETEM

/ we provide all forms of technical support to our partners, offering all the necessary tools, but also regular communication, in order to prevent and address all technical issues related to a construction, throughout its life cycle.

In addition to the physical and online meetings, but also the constant updating of our digital material, ETEM provides to its partners

/ All the necessary Newsletters / Press releases of technical and commercial content / Easy access to the ETEM Digital Download Center where all the forms that come with the systems are available (technical catalogs, product passports, certifications, etc.)

Based on the market need for fast service we provide

- / The "Express product list", which is updated automatically in real time, based on the availability of the warehouse.
- / Its specialized personnel takes care of learning the operation of the ETEM's software, which serves in the detailed calculation of performance in order to fully meet the design specifications of each project, as well as it's cost.

Whenever a new product is designed or when changes are made to existing solutions, ETEM takes care, through its consultants, to analyze and explain to its partners all the changes and the technical characteristics.









## ENVIRONMENTAL PROTECTION & SUSTAINABILITY

According to the principles of sustainability and bioclimatic design, the modern buildings today, need to be durable, functional and offer comfortable living conditions, promoting the well-being of users.

An environmentally sustainable building, designed, constructed and operated to minimize overall environmental impact and protect natural resources, must have a range of certified systems in place to ensure the objective measurement of important environmental indicators, and aim at maximizing energy savings, in the optimal management of solar radiation but also in the overall building management of the facade with the use of environmentally friendly products. In addition to the performances achieved by the systems during the use of the building, special attention is now given to the overall energy footprint of the materials used in it.

Aluminum, as a material, is collected and recycled to 100%, requiring only 5% of the energy needed for its primary production, without any quality degradation or structural change. This is a feature that makes it one of the most environmentally friendly building materials. The choice of thermal insulation frames of aluminum, guarantees the energy shielding of a building resulting in a significant improvement of energy efficiency and the saving of energy and financial resources in long term.

ETEM has the relevant product declarations (EPD's - Environmental Product Declaration) both for the raw material itself (aluminum alloys - EPD production) as well as for it's integrated aluminum systems, strengthening its commitment to the principles of sustainable construction. At the same time, ETEM has been certified with ISO 14001:2015, the international standard which proves that the infrastructure of the company is responsible and operates with respect to the environment and society in general.

The upgraded systems of ETEM, combine high thermal performance providing passive ventilation and natural cooling of the building, through the wide variety of choices of façade materials. At the same time, the wide range of shading options offered by the company, supports the operation of modern buildings.

The green buildings, staffed with ETEM systems, are efficient in terms of resources, energy and materials, while creating a comfortable living environment for the end user.

## Notes






### **HEAD QUARTERS**

Ir. Politechniou 1-4, Magoula 19018, T. (+30) 210 489 8605 F. (+30) 210 489 8500-10 Email: etem.gr@etem.com

THESSALONIKI BRANCH 6th km. Thessaloniki-Athens, 570 09 Kalochori Thessaloniki T. (+30) 2310 790330

F. (+30) 2310 753416

CRETE BRANCH
Road Chanion-Sounias, 73131
T. 28210 09875
F. 28210 31104
Email: chania@etem.com

## **COMMERCIAL BRANCHES**

## Bulgaria

ETEM BULGARIA S.A.
119 A Iliyantsi blvd. , 1220 Sofia, Bulgaria
T. +359 2 92 19 111
F. +359 2 92 19 160
Email: etem.bg@etem.com

### Romania

ETEM SYSTEMS SRL RO-077090 llfov, com. Domnesti, Bretea Autostrada Bucuresti Pitesti km 11 +272 T. (+40) 21 351 81 15 F. (+40) 21 319 30 24 Email: etem.ro@etem.com

### Serbia

ETEM SCG
Cara Dusana BB, Industrijska Zona 22 330
T. (+381) 22 32 80 19-20
F. (+381) 22 32 80 19-20
Email: etem.sr@etem.com

#### Ukraine

ETEM SYSTEMS LLC Zdolbunivska Str., 7-D T. (+38 044) 499 07 87 F. (+38 044) 499 07 86 Email: office@etem.com.ua

