



Windows for a better life

THERMIA®
BARCELONA

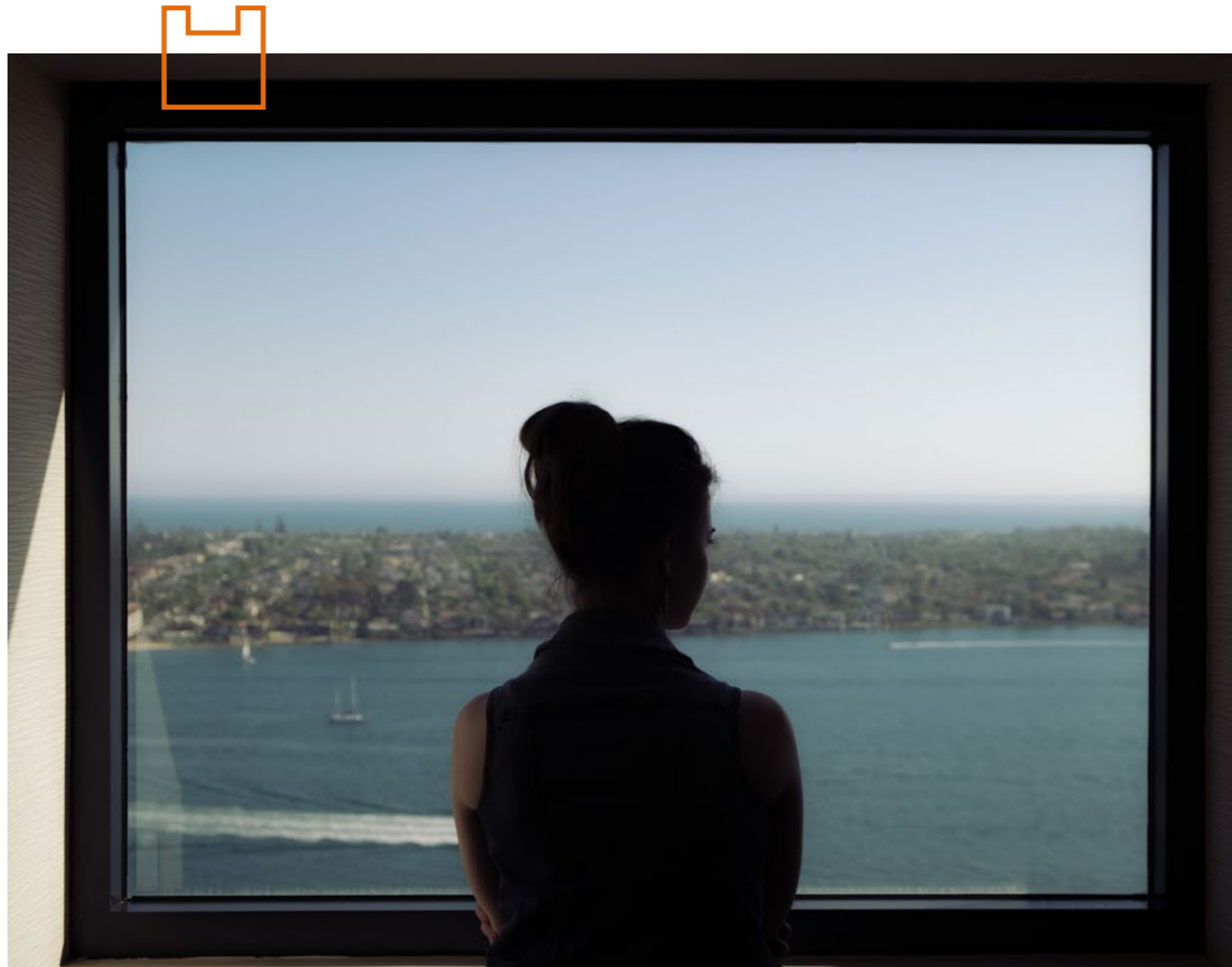


**THERMIA BARCELONA PHILOSOPHY
WHO WE ARE AND WHO WE WILL BE**

At Thermia Barcelona® we believe that windows should be a perfect blend of emerging-generation materials and cutting-edge technology, with the ability to offer construction solutions to build new spaces where none had been before.

As the link to the outside world, they should enable natural light to radiate throughout the space, providing comfort and isolation while maximizing energy savings, which is necessary now more than ever. A window should help to create functional, comfortable, and beautiful homes and be in harmony with the people living there. This is why we strive to go the extra mile every day.

“For us, a window is more than just a structure embedded to a wall, for us a window is nothing less than an opportunity to live a better life”.



“Looking from outside into an open window you never see as much as when you look through a closed window. There is nothing more profound, more mysterious, more pregnant, more insidious, more dazzling than a window lighted by a single candle. What you can see out in the sunlight is always less interesting than what goes on behind a window pane. In that black or luminous square life lives, life dreams, life suffers.”

Charles Baudelaire

**Design
Comfort
Silence**

Cover: Distributor: ALUTERMICS / Building company: INTERDICO HOME BUILDER / © photo: Sergio López @sergio.lopez.photo

TABLE OF CONTENTS

Thermia Barcelona

Approach and philosophy of Thermia Barcelona	10
Quality beyond the product	12
Facilities	14
Thermia® showrooms around the world	16

Completed works

Clients who have put their trust in Thermia Barcelona	20
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Thermia® windows

Types of windows	34
Technical solutions	36
Accessories	37
Colors and finishes	38

Our CE casement windows

Thermia® AF35 CE	42
Thermia® AF52 CE	44
Thermia® AR52 CE	46
Thermia® AR62 CE	48
Thermia® AR78+ CE	50
Thermia® OC78 LUMIA	52

Our canal 16 casement windows

Thermia® AR78+ C16	54
Thermia® OC78+ C16	56

Our sliding windows

Thermia® CF22	58
Thermia® CF26	60
Thermia® CF31	62
Thermia® CF40 VERSIA	64
Thermia® CR31	66
Thermia® CR40 VERSIA	68
Thermia® CR46 MAGNA	70
Thermia® ER52	72

Other products

Thermia® PM40 SHUTTER	74
Thermia® MQ22 MOSQUITO SCREEN	78
Thermia® AF52M MULLION	80
Thermia® FS45 QUICK	82
Thermia® GR48 GLASS RAIL	84
Thermia® RAILING	86
VELAM louver	87
Thermia® PM40 DECOR	88

Manufacturing Thermia® windows

Manufacture Thermia® windows	90
Install Thermia® windows	91

Windows for a better life

Energy efficiency	92
The noise problem	94

Appendix

Summary of profiles	97
Technical chart of Thermia® systems	102
Acoustic properties of glazed windows	104
International distribution	105



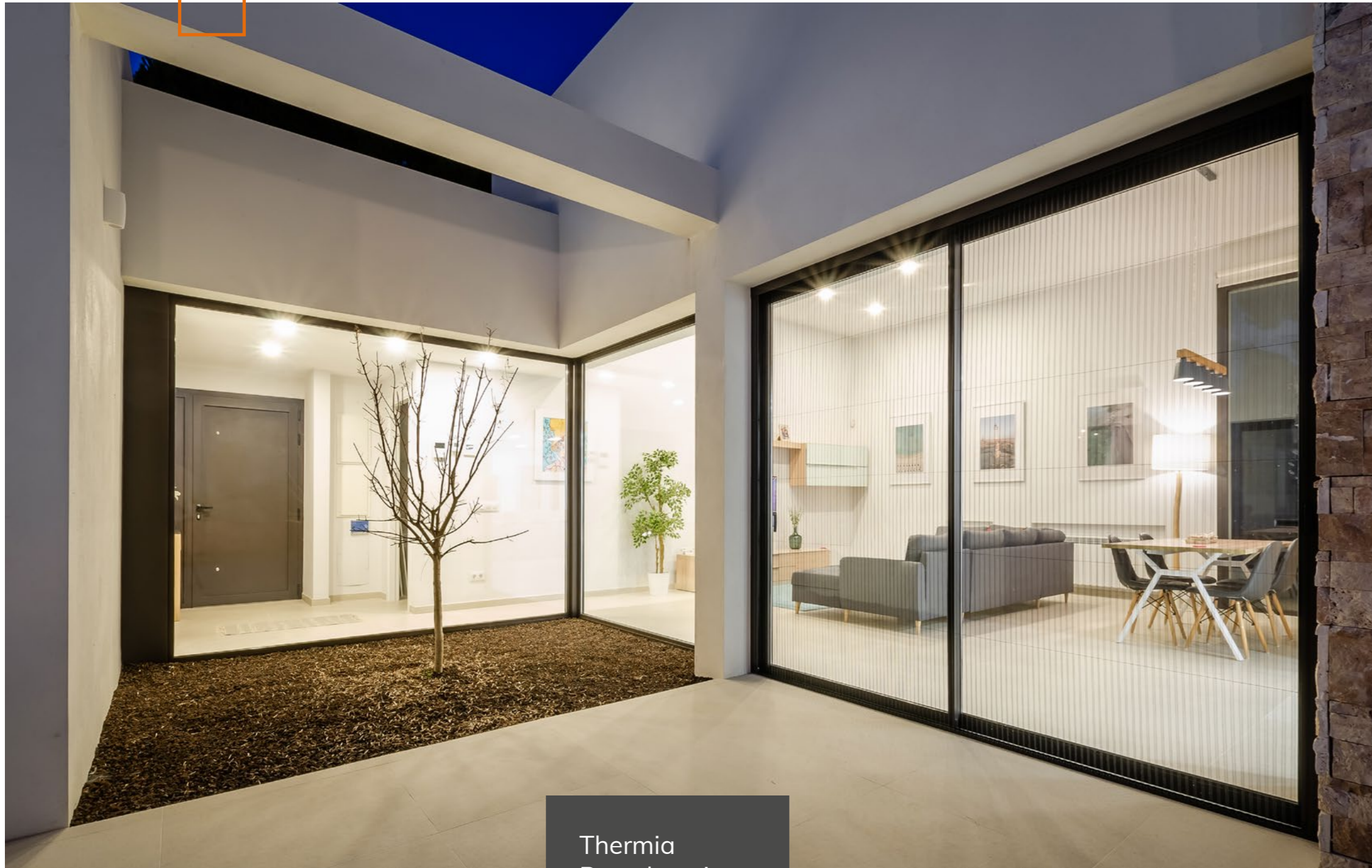


Our home is our shelter,
our temple, our comfort.
The place to get in
touch with who we are.
Where we flow.

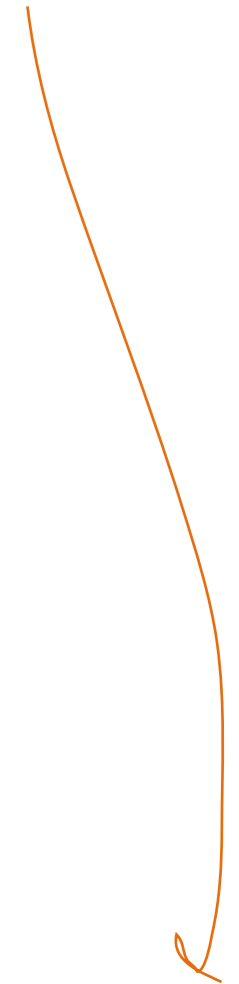
We forge stories
through objects, and we
will talk about ourselves
through them and tell
our stories from **the
window.**

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Windows for a better life



Our products are the result of **exhaustive study and design**, with the aim of offering the client **much more than a window.**



Thermia Barcelona is the perfect partner for **your projects.**

Open up a world of possibilities for your business by offering our **windows for a better life.**

© image: @sergio.lopez.foto | Thermia distributor: Alutermics

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Our way of understanding what we do: **Thermia Barcelona's philosophy and approach**

The human capabilities of Thermia Barcelona are what define us as a company. Without our team of involved and committed professionals, it would be very difficult to do what we do.

And this aspect, that of close involvement, is what we try to convey in our dealings with every client. Our commitment extends beyond the purchase of the product. We are committed to advising you, listening to you, and supporting you through every step of your project.

Windows for a better life

Thermia Barcelona®



One of our goals at Thermia Barcelona is offering our clients a quality, long-lasting, and guaranteed product that meets the comfort and design requirements that today's market demands. **Our client should feel that they partnered with a professional and responsible team that will guide and support them all the way.**

In our eyes a window is...

"We think of a window as something more than a structure embedded in a wall.

For us, a window must go further, creating spaces where there were none before and allowing our home to be bathed in natural light. It should be airtight to protect us from cold and heat, and provide us with a silent

environment. It should have a design that harmonizes with the rest of the architecture and facilitate energy savings. A window should help create a more comfortable and functional home, with minimal effort on the part of the user.

For us, a window is nothing less than an opportunity for a better life. And that is

why we need to produce a high-quality product.

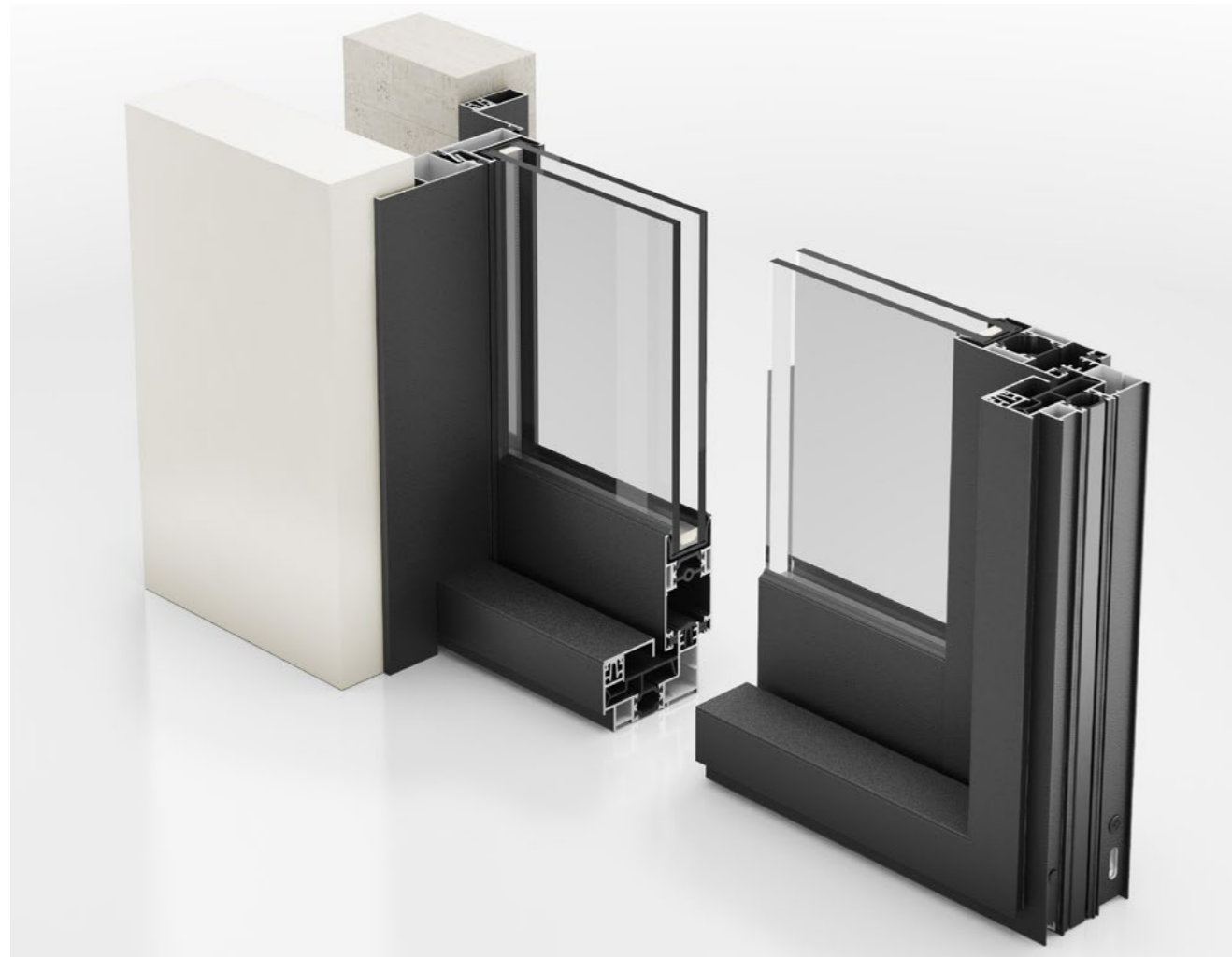
A window of this excellence can only be created through an ingenious design system. In other words, all the elements that make up the window must have been studied and must be properly combined so that the window fulfills the mission we have entrusted to it.

The technical area of Thermia Barcelona is constantly looking for ways to improve and fine-tune the system, in order to improve the features of each and every one of our windows."

Committed, professional, creative, technically-minded, involved, transparent, curious, empathic, optimistic, sensitive. That is the approach that we take here at Thermia Barcelona.



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The quality of Thermia® windows: a constant from start to finish

In an increasingly demanding market, we must offer our clients an option with maximum assurance of certified quality.

All Thermia Barcelona® enclosure systems are designed and tested in strict compliance with European market regulations, which require high performance in terms of airtightness, durability and performance in inclement weather, together with maximum energy savings.

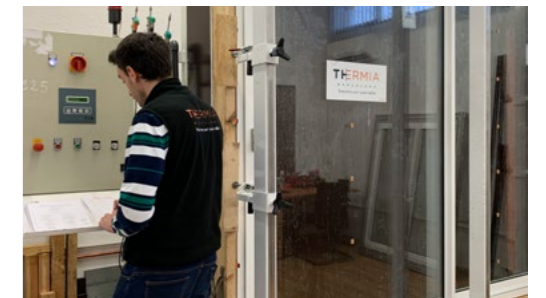
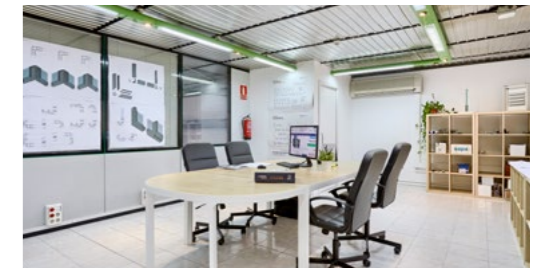
Windows for a better life

Thermia Barcelona®



Thermia Barcelona® systems are extruded and assembled in accordance with ISO 9001 and tested under Standard EN 14351-1:2006. The surface treatments have the QUALICOAT SEASIDE quality seal for lacquer, QUALIDECO for imitation wood lacquer, and QUALANOD for anodization.

All Thermia® windows are manufactured by specially-trained professionals to ensure that every component of the window will work properly.



Technical office and in-house test bed facility

These departments provide a wealth of benefits, with important examples being:

1. **Better control and speed** in implementing system improvements.
2. **System adaptations** for specific markets or even **individual works**.
3. **Constant innovation** to adapt our product to market changes.

QUALITY SEALS



Qualanod seal for anodization

License number: 1014



Qualicoat seal for lacquer

License number: 405



Qualideco seal for imitation wood

License number: ES-0009F



CERTIFICATION



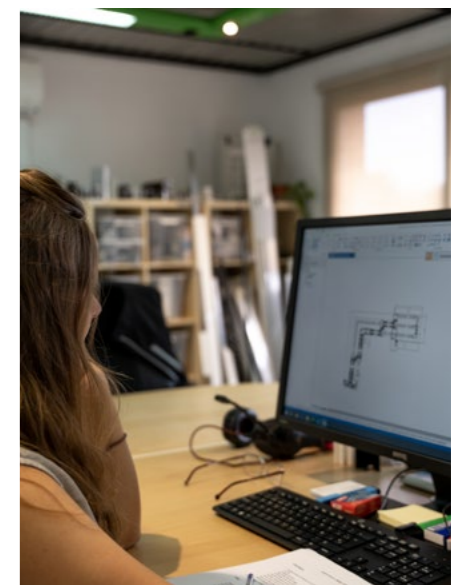
DIMAC SL 2020 ACCESSORY
EN 1435-1: 2006
THERMIA BARCELONA SERIES

All Thermia Barcelona® systems are tested in laboratories approved to conduct air permeability, watertightness and wind resistance tests.

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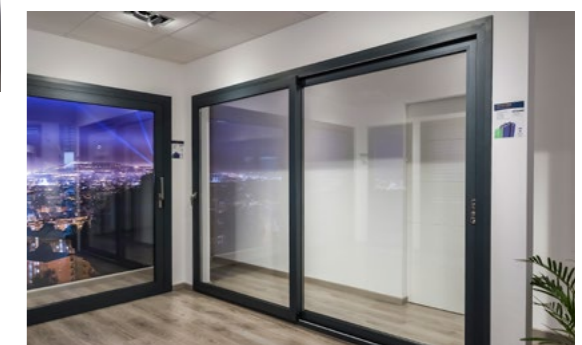
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Thermia Barcelona®



Facilities. Where Thermia® windows are designed and manufactured

Thermia Barcelona's headquarters are located in Sant Quirze del Vallès (Barcelona). This strategic location, in proximity to major international sea ports and airports, allows us to deliver products to our customers at any destination in the world, quickly and efficiently.



More than 7000m²
of facilities
to serve our clients

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Windows for a better life

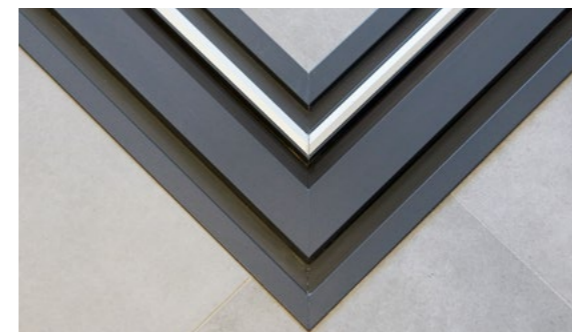
Look. Touch. Handle.
Without a doubt, the
best way to get to
know our product.



Thermia® showrooms An essential tool

Thermia Barcelona's showrooms have become an essential tool during the sales process for our clients from all backgrounds.

In this interactive space, you can observe the technical features of the system directly, handle every product category, and experience our product quality for yourself. Everything you need to help you or your clients make a decision.



It is worth pointing out that **most visits** to our showrooms end in a **sale**



Thermia® showrooms

The importance of seeing and touching the product

Barcelona (Spain)



Location
C/Narcís Monturiol 34
08192 Sant Quirze del Vallès, Barcelona (Spain)

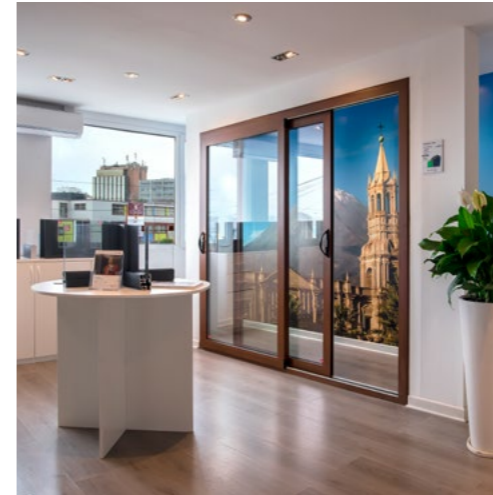
Girona (Spain)



Location
Carrer Pla de Dalt,
17840 Sarrià de Dalt, Girona (Spain)

Thermia Barcelona currently has 6 of its own showrooms where people from around the world can discover quality aluminum windows.

Lima (Perú)



Location
Av. Paseo de la Republica 3583
San Isidro 15047 Lima, Peru
Phone. +51 1 7197649

Arequipa (Perú)



Location
Av. independencia 1244, esquina 2 de Mayo, 04001 Arequipa, Peru
Phone. +51 959604480

Cusco (Perú)



Location
Avenida Pachacutec,
501 Wanchaq, Cusco, Peru
Phone. +5117197649

Trujillo (Perú)



Location
Avenida Pachacutec,
501 Wanchaq, Cusco, Peru
Phone. +5117197649



Location: Costa Brava – Catalonia, Spain
Architect: XS arquitectes
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Thermia® windows around the world **Completed works**



Chabrier Building

Location: Miraflores, Lima, Peru
Braganini Constructores



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Works



Casa RDP

Location: Quito, Ecuador.

Architects: Daniel Moreno Flores / Sebastián Calero



Winner of the Quito Architecture Biennial BAQ2016

Finalist in the Latin American Architecture Biennial 2017



Casa RDP

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Silence



WYNDHAM Hotel

Hotels. Quieter, better insulated guest rooms, leading to a higher rate of satisfaction.



Windows for a better life

Works



Wyndham Hotel Quito International Airport

Location: Mariscal Sucre Airport - Quito, Ecuador.

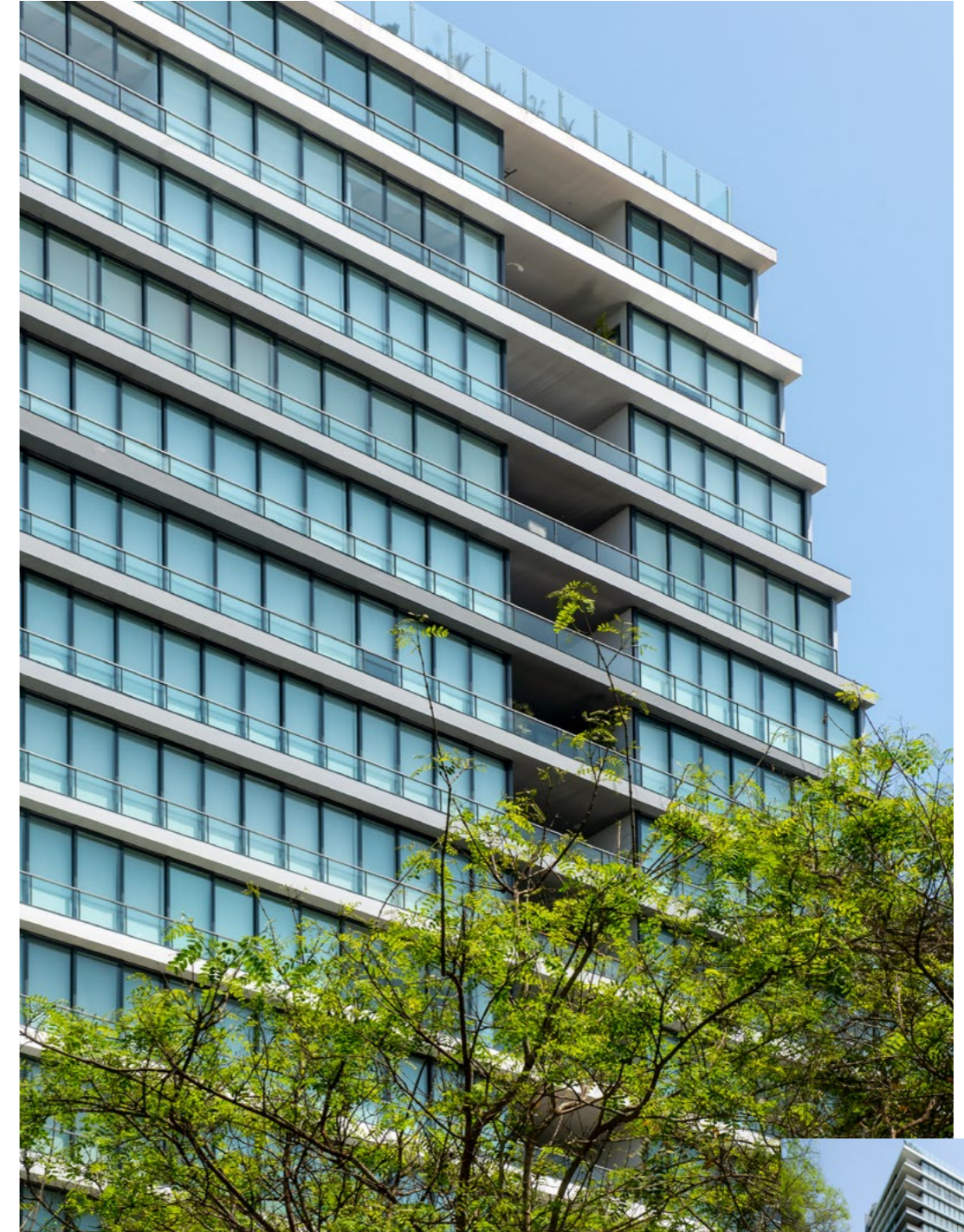
Architect: Grupo Pronobis.



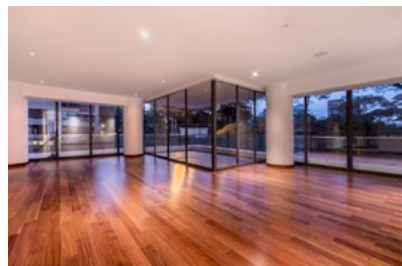
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Windows for a better life

Works



Thermia® windows
in Spain, France, Peru,
Colombia,
Ecuador, Chile,
Uruguay, El Salvador,
Costa Rica,
Panama, Dominican
Republic, India.

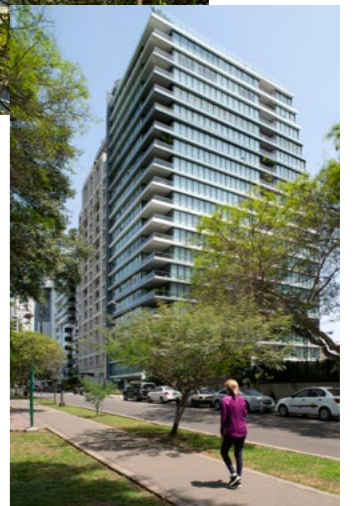


Klimt Building

Klimt Building

Location: Miraflores District - Lima, Peru

Architect: Bernardo Fort Brescia.

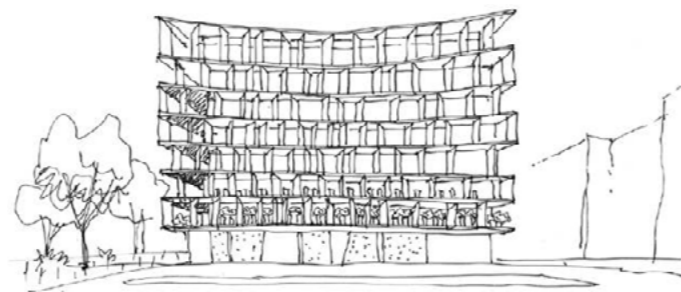
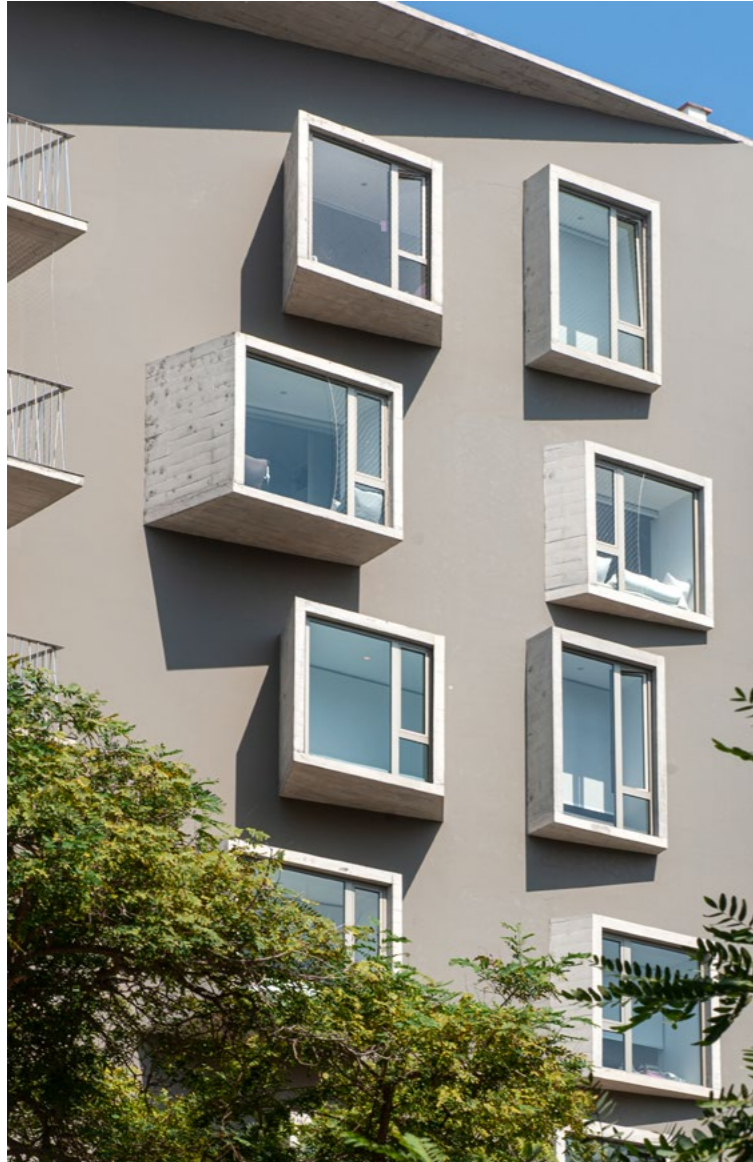




United Nations Building

Location: Miraflores, Lima, Peru

Architects: Sandra María Barclay Panizo, Jean Pierre Crousse De Vallongue Rastelli.



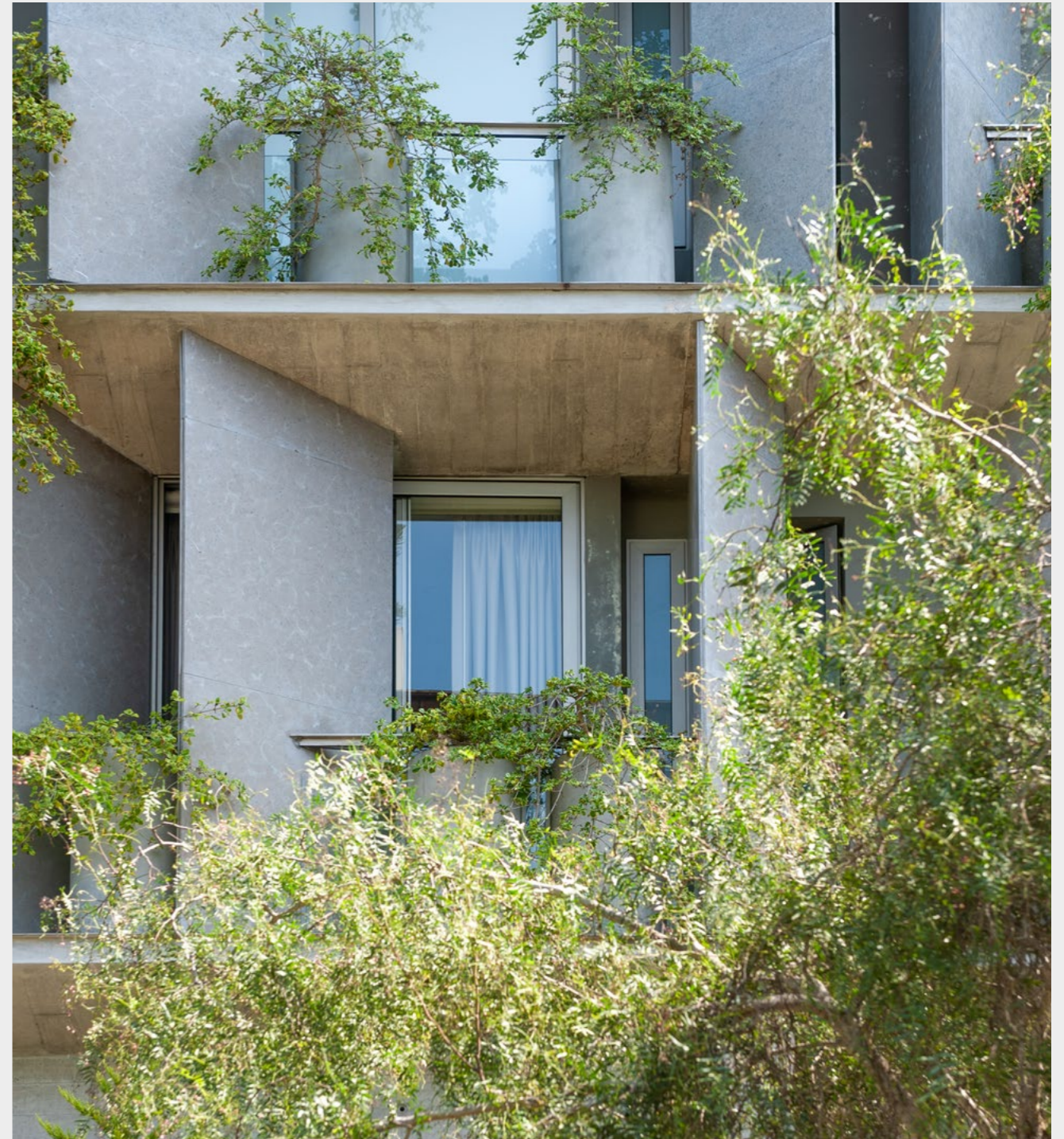
United Nations Building

Location: Miraflores District - Lima, Peru

Architects: Sandra Maria Barclay Panizo, Jean Pierre Crousse De Vallongue Rastelli.

**Winner of the PAC Award
(LIMA 2019 Architecture and City Award)**

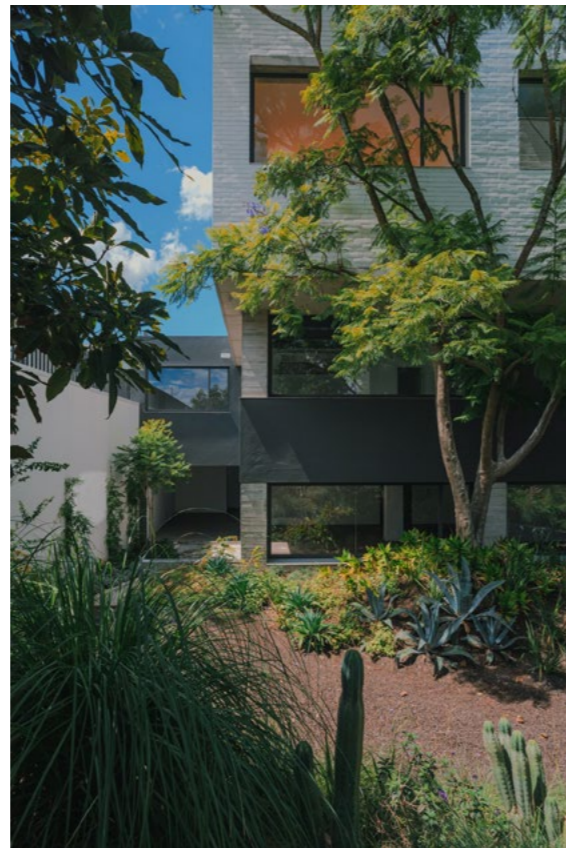
2019 low and medium-density multifamily housing category.



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Windows for a better life

Works



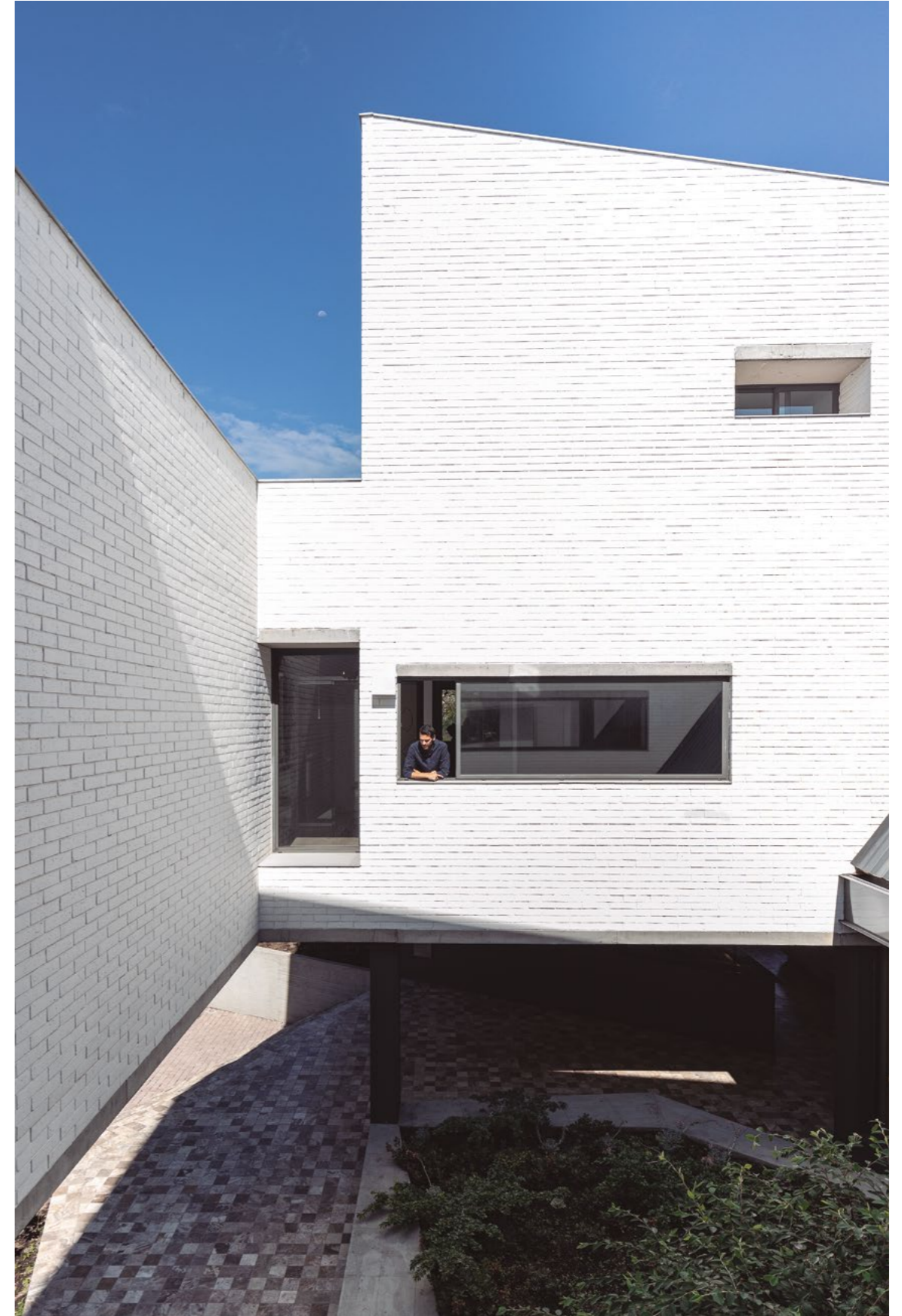
'Casa Natura'

Location: Valle del Tumbaco, Ecuador

Architects: Diez + Muller

Winner of the Quito Architecture Biennial BAQ2016

Finalist in the Latin American Architecture Biennial 2017



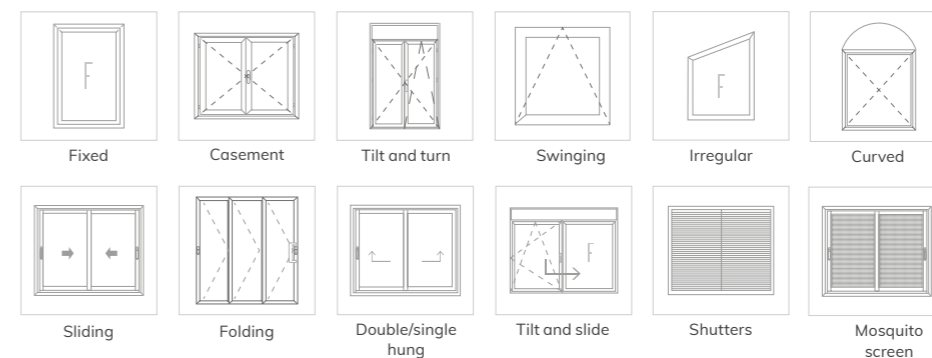
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Windows for a better life

A Thermia® window for everyone

Thermia® systems have been developed to provide a solution for every type of architectural structure. Everything is conceived to allow our clients to choose:



Types of windows offered by Thermia Barcelona®

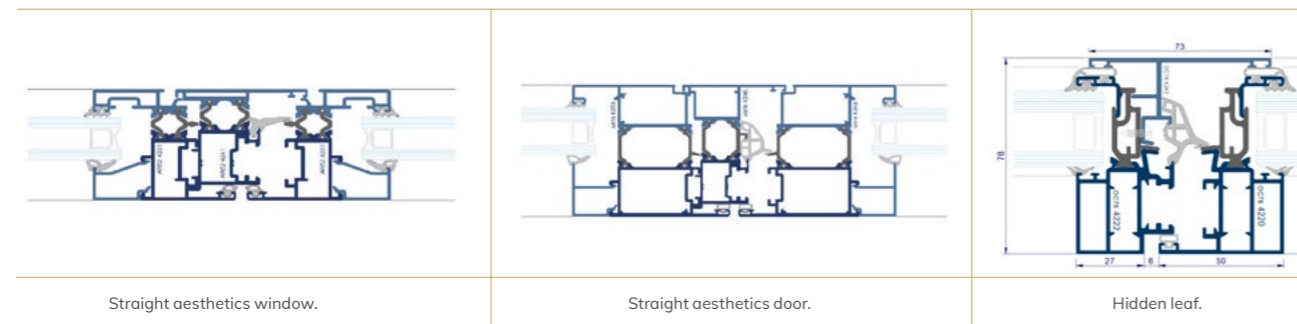
Design
Comfort
Silence

Technical solutions

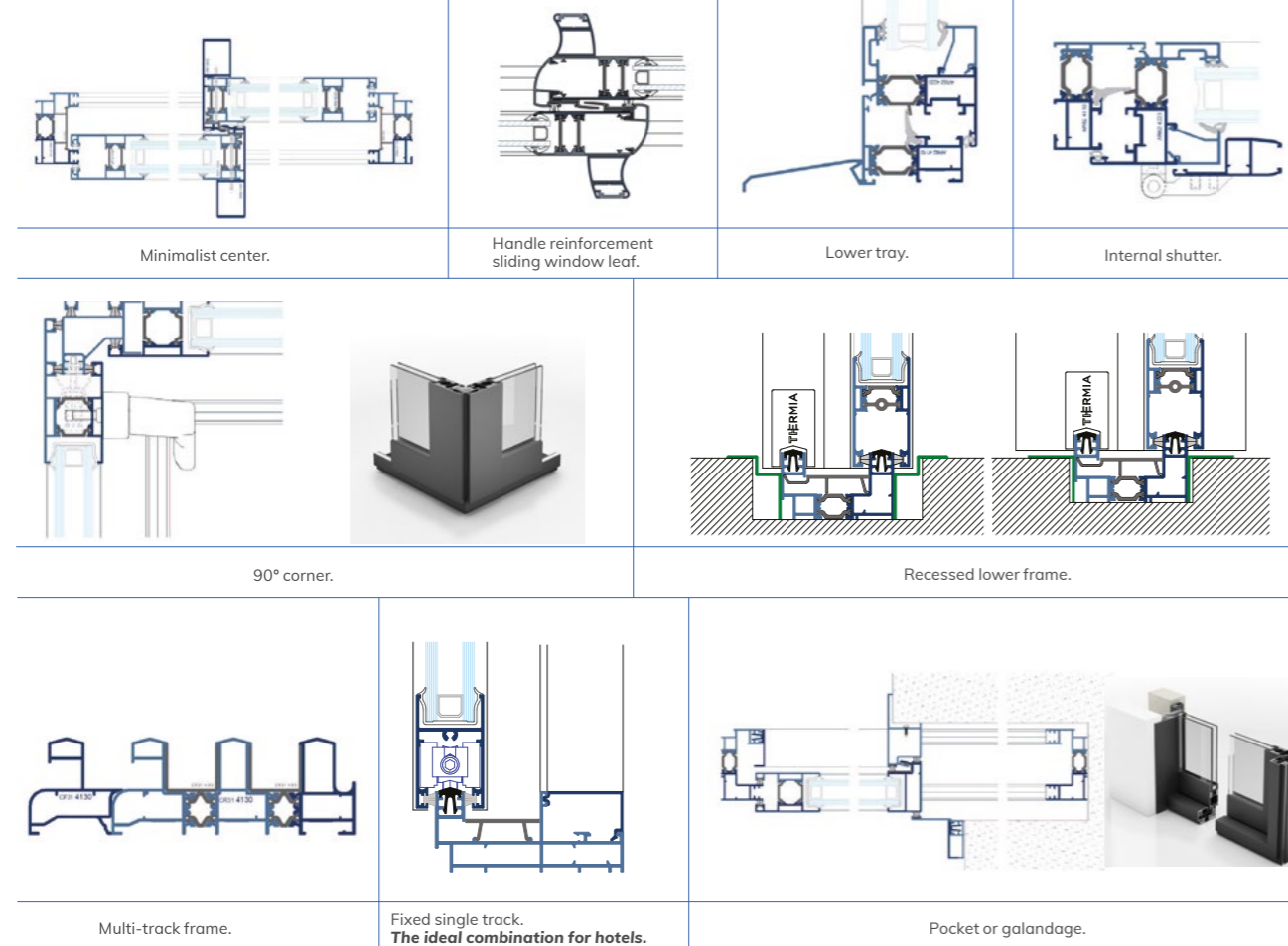
Windows for all types of projects.



AESTHETIC SOLUTIONS



TECHNICAL SOLUTIONS



Windows for a better life

Thermia® windows

Accessories

Getting the details right



1 / MANEUVER ACCESSORIES

Manufactured pursuant to the ISO 9001:2008 quality management standard and ISO 14001:2004 on environmental management and EN1670; ISO4628-2; ISO10289; ISO 2081 in terms of exposure to corrosion in a salt-spray chamber (24 hours).

Casement, outwards opening, and tilting cremone fittings: pursuant to EN 13126-1 and 4 and tested for 25,000 cycles. Comprising cast aluminum and stainless steel.

Tilt and turn fittings: Pursuant to EN 13126-1 and 4. Tested for 25,000 cycles, and weight of up to 130 kg/leaf. Made with high-density zamak with an anti-corrosion treatment and stainless steel.

Multi-point fittings for sliding systems: Pursuant to EN 13126-1 and 4 and tested for 25,000 cycles.

Projecting stay hinges: Pursuant to EN 13126-1 and 4 and tested for 25,000 cycles. Made of stainless steel.

Pressure closing devices: Pursuant to EN 13126-2 and tested for 25,000 cycles.

Window hinges (A0003120): Pursuant to EN 13126-1 and 4 and tested for 200,000 cycles. 70 kg loads. (2 hinges) and 90 kg. (3 hinges). Comprising extruded aluminum and stainless steel.

Door hinges (A0003130): Pursuant to EN 13126-1 and 4 and tested for 200,000 cycles. 90 kg loads. (2 hinges) and 110 kg. (3 hinges). Comprising extruded aluminum and stainless steel.

Closing devices: Pursuant to UNI EN 12209 for the range of 1 side closing devices and EN 15685 for multi-point closing devices.

Main frame and leaf closing elements: Pursuant to EN 13126-1 and UNI EN 12051 and tested for 10,000 cycles.

2 / BUILT-IN CLOSING DEVICES FOR SLIDING FIXTURES:

Pursuant to EN 1670. Tested at SGI International for 20,000 cycles.

3 / BEARINGS FOR SLIDING FIXTURES

Manufactured pursuant to ISO 9001 on quality management and UNI EN 13126-15. Tested for 10,000 or 25,000 cycles depending on the reference.

4 / AIRTIGHTNESS AND WATERTIGHTNESS ELEMENTS AND ACCESSORIES

Pursuant to ISO 9001 on quality management and manufactured pursuant to ISO 3302 on tolerances and UNE EN 12635.

Sealing and glazing gaskets:

Manufactured in EPDM 70 SHORE rubber of the highest quality, resistant to weather and UV rays.

Brush weather-stripping: Pursuant to AAMA 701 and 702, manufactured using textured, siliconized multifilament polypropylene yarn stabilized against UVA rays, with a middle non-woven fabric sheet. Brush weather-stripping ultrasonically welded to the stiff

polypropylene base.

Air seal: Extruded, anodized and made-to-measure aluminum base. Textured, siliconized multifilament polypropylene yarn stabilized against UVA rays, with a middle sheet.

5 / ASSEMBLY ACCESSORIES

Manufactured pursuant to ISO 9001 on quality management.

Corner joints: Manufactured using cast or extruded aluminum and Dracomet 320-coated M6 screws, zamak buttons, and reinforced steel springs.

Alignment joints: Stainless steel

6 / OTHER ACCESSORIES (Plastic molded parts pertaining to the system)

Manufactured pursuant to ISO 9001 on quality management.

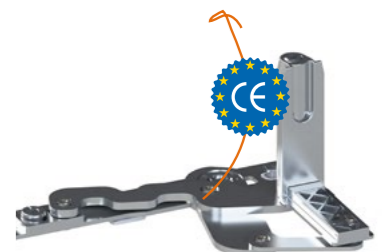
Decorative elements: Polyester materials, high-density PA6 polyamide.

Functional elements: PA6+TPE, polyamide and fiberglass.

Only the best accessory brands guarantee that windows will work properly and keep performing for a long time. This is why **Thermia Barcelona® windows are made exclusively with accessory brands manufactured in accordance with European standards.**



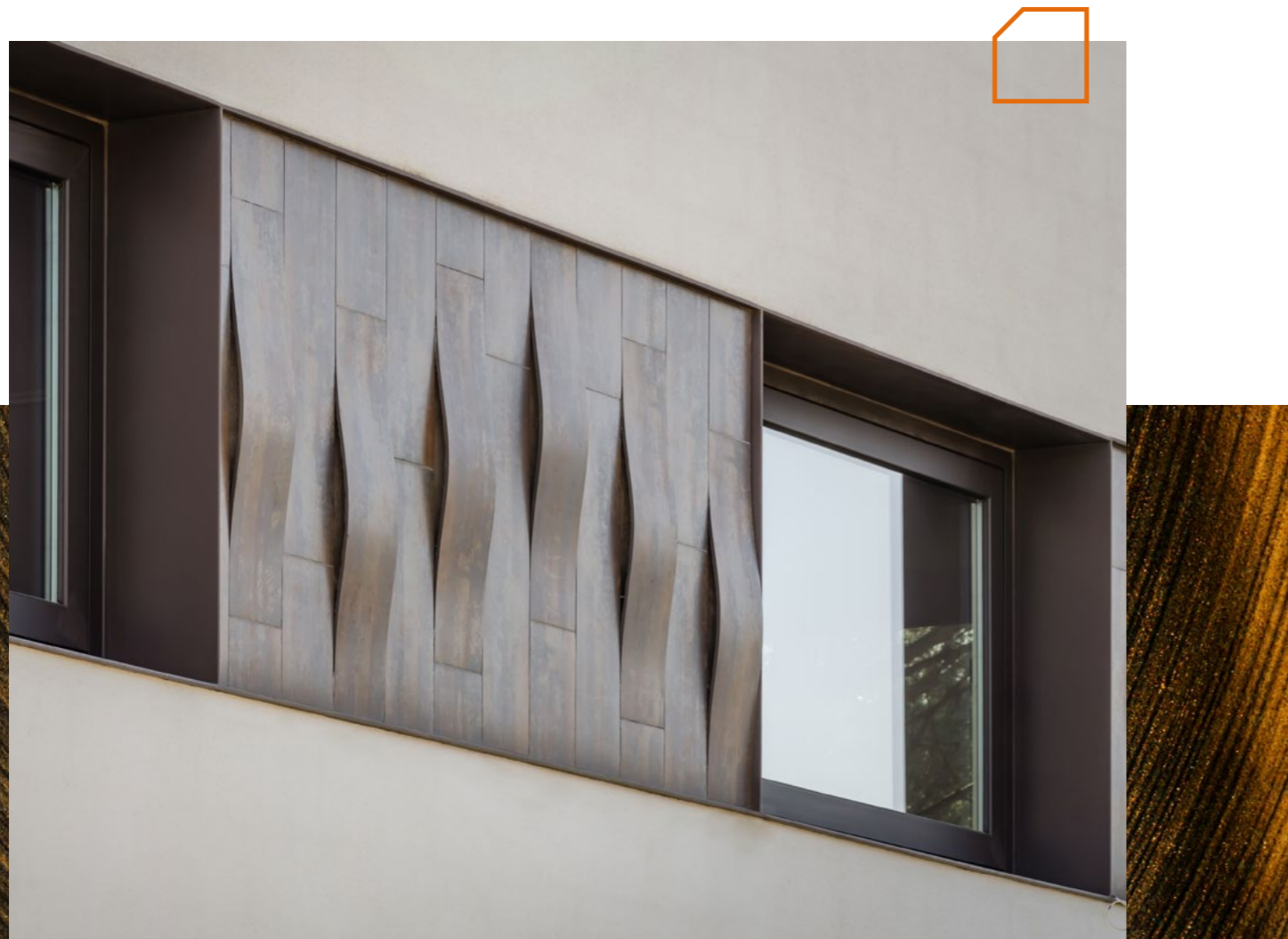
Every component of the window has undergone open-close cycle testing and corrosion measurement in a salt-spray chamber.



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Windows with a style of their own

At Thermia Barcelona®, we understand the importance of design in the architectural world, and that is why we offer today's most sought-after colors and finishes at the best price. So that you can add that special touch to your projects.



Profile surfaces are treated to ensure long-lasting windows. Every treatment has a quality seal, meaning that every Thermia window manufactured or sold to your clients is synonymous with reliability and durability.

Windows for a better life



Thermia® windows

Standard price		Gloss	Matte	Texture	Special price		Gloss	Matte	Texture
RAL 1013 cream		✓	✗	✓	Copper rust		✗	✗	✓
RAL 1015 cream		✓	✓	✓	Noir 100 sable		✗	✗	✓
RAL 3005 red		✓	✓	✗	Noir 200 sable		✗	✗	✓
RAL 5010 blue/gloss		✓	✗	✓	Brun 650 sable		✗	✗	✓
RAL 5014 blue		✗	✗	✓	Blue 600 sable		✗	✗	✓
RAL 6005 green		✓	✓	✓	Gray 150 sable		✗	✗	✓
RAL 6009 green		✓	✓	✓	Wood price				
RAL 6021 green		✗	✗	✓	Aged pine				Smooth ✗ Texture ✓
RAL GRAFITO gray		✗	✓	✗	Sapelli mahogany				✓ ✓
RAL 7012 gray		✓	✓	✓	Golden oak			✗	✓
RAL 7015 gray		✗	✗	✓	Knotted pine				✓ ✓
RAL 7016 gray		✓	✓	✓	Dark brown				✓ ✓
RAL 7022 gray		✓	✓	✓	Golden African walnut			✗	✓
RAL 7024 gray		✓	✗	✓	Dark walnut			✗	✓
RAL 7031 gray		✗	✗	✓	Irish oak			✗	✓
RAL 7035 gray		✓	✓	✓	Ash			✗	✓
RAL 8014 brown		✓	✓	✓	Wenge				✓ ✓
RAL 8017 brown		✓	✓	✓	Andalusian walnut				✓ ✓
RAL 8019 brown		✓	✓	✓	Light cherry				✓ ✓
RAL 9010 white		✓	✓	✓	Teak				✓ ✓
RAL 9011 black		✓	✓	✓	Anodized price				
RAL 9016 white		✗	✓	✓	Bronze				Matte ✓ Sanded & polished ✓
					Stainless steel				✓ ✓
					Silver				✓ ✓

Qualanod seal for anodization
 License number: 1014

Qualideco seal for imitation wood
 License number: ES-0009F

Qualicoat seal for lacquer
 License number: 405

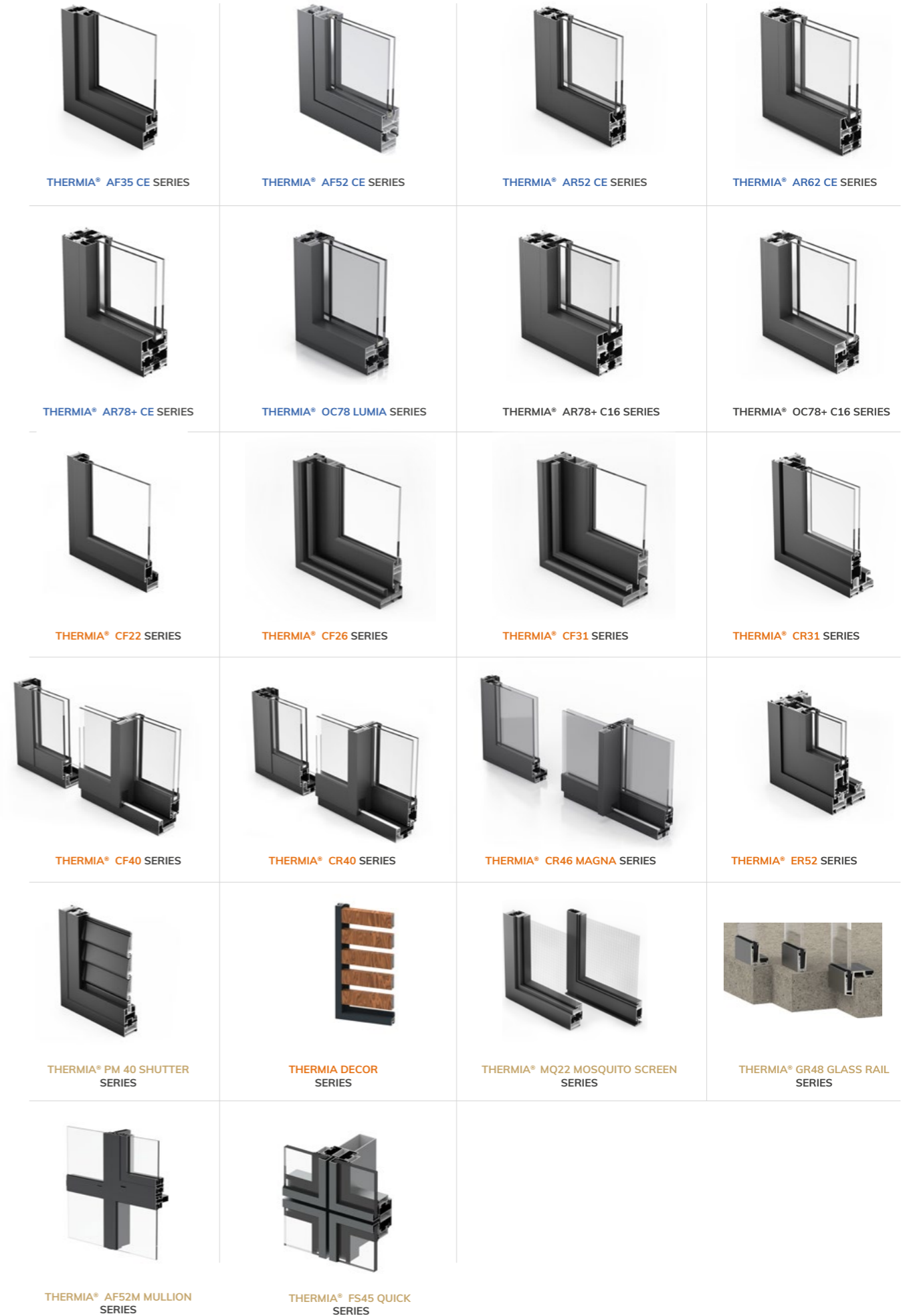
Quality seals

Design
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Silence



Thermia Barcelona® Series

Systems for aluminum windows



Thermia® AF35 CE

The basic,
effective window

SERIES FEATURES	
Thermal break	No
Main frame	35 mm
Main leaf	35 mm
General thickness of the profiles	1.2 mm
Maximum casement glazing	8-21 mm
Maximum casement leaf weight	90 Kg
Tilt and turn leaf maximum weight	130 Kg
Available profiles	Window



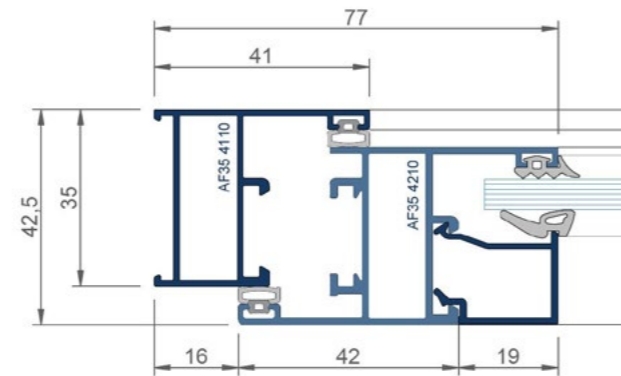
ACOUSTICS

Estimated sound attenuation up to **Rw 34 dB**.
Window size: 1.23 m x 1.45 m with acoustic laminated glass of 4.4/cam/4.4A

TEST RESULTS

-  Air permeability **4**
-  Watertightness **9A**
-  Wind resistance **C3**

CROSS-SECTION



Results of official tests performed on Applus® and on the basis of Annex E of standard EN-14351-1:2006

Quality seals



Qualanod seal for anodization
License number: 1014



Qualicoat seal for lacquer
License number: 405



Qualideco seal for the imitation wood
License number: ES-0009F

Certification



THERMIA BARCELONA
EN14351-1:2006+A2:2016



Thermia® AF52 CE

Safe ventilation and energy saving

SERIES FEATURES	
Thermal break	No
Main frame	45 mm
Main leaf	52 mm
General thickness of the profiles	1.5 mm
Maximum casement glazing	27 mm
Maximum casement leaf weight	90 Kg
Tilt and turn leaf maximum weight	130 Kg
Available profiles	Window / Door



ACOUSTICS

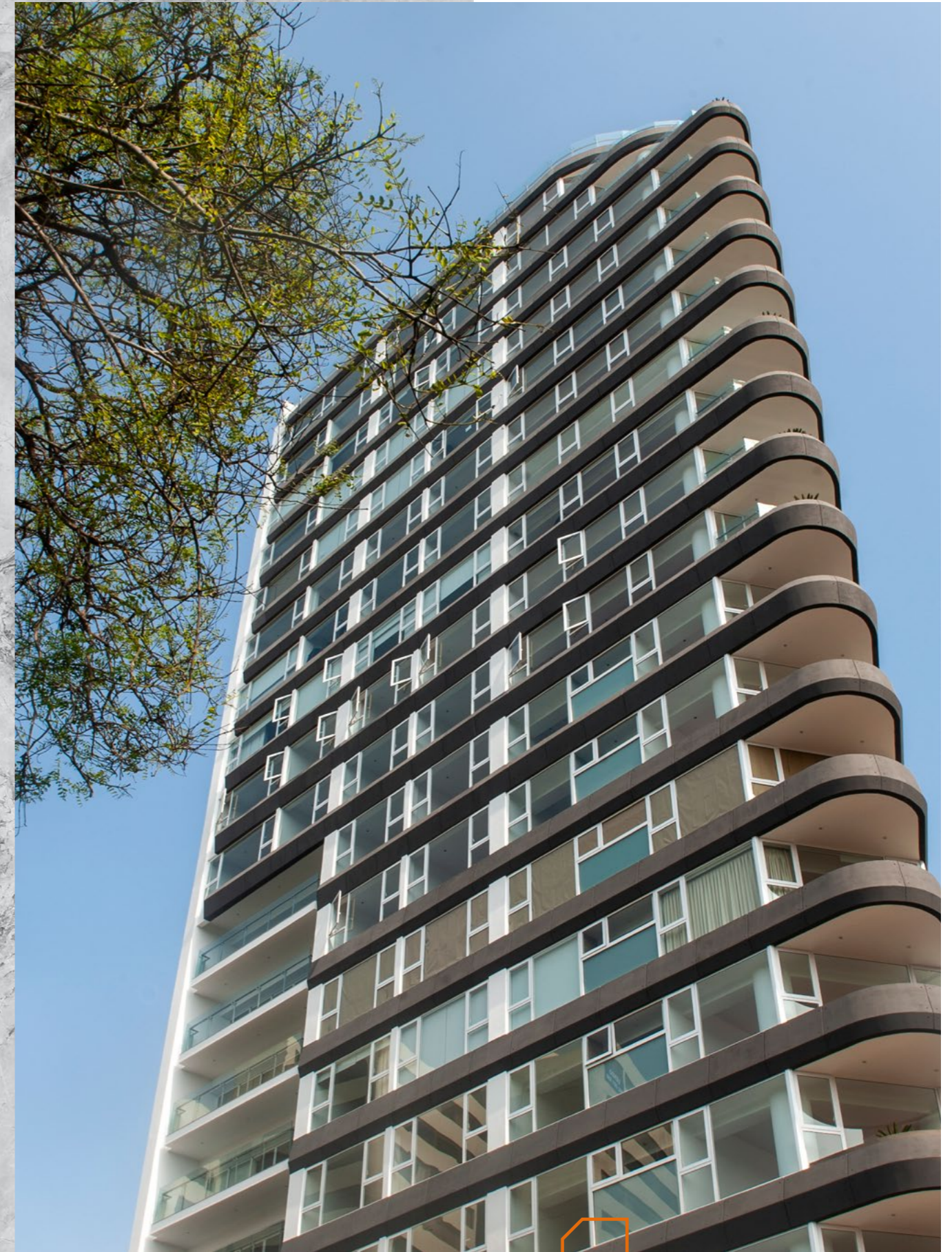
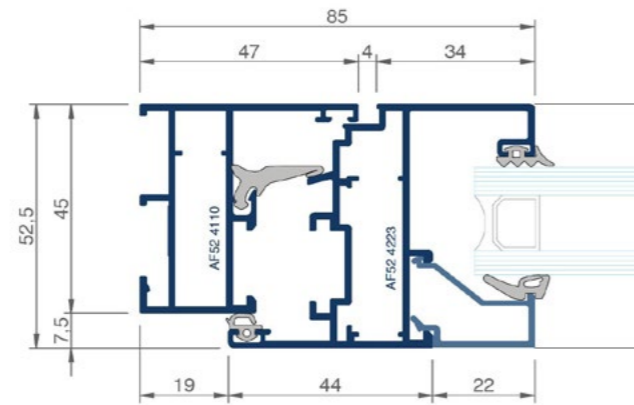
Estimated sound attenuation up to **Rw 39 dB**.
Window size: 1.23 m x 1.45 m with acoustic laminated glass of 4.4/cam/4.4A

TEST RESULTS

-  Air permeability **4**
-  Watertightness **9A**
-  Wind resistance **C5**

Results of official tests performed on ENSATEC® 146488 and on the basis of Annex E of standard EN-14351-1:2006

CROSS-SECTION



Quality seals



Qualanod seal for anodization
License number: 1014



Qualicoat seal for lacquer
License number: 405



Qualideco seal for the imitation wood
License number: ES-0009F

Certification



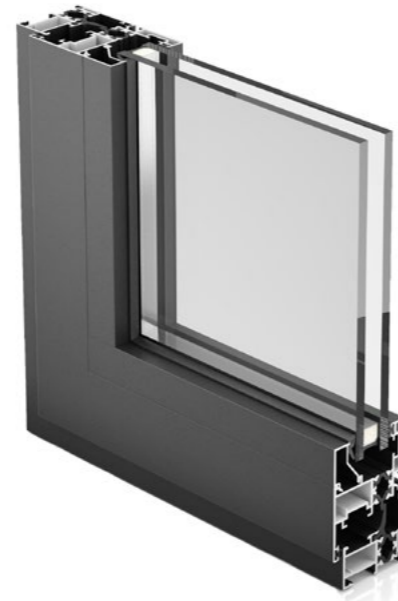
THERMIA BARCELONA
EN14351-1:2006+A2:2016



Thermia® AR52 CE

Thermal insulation and acoustic isolation for everyone

SERIES FEATURES	
Thermal break	Yes / 14 mm
Main frame	45 mm
Main leaf	52 mm
General thickness of the profiles	1.5 -1.6 mm
Maximum casement glazing	27 mm
Maximum casement leaf weight	90 Kg
Tilt and turn leaf maximum weight	130 Kg
Available profiles	Window / Door



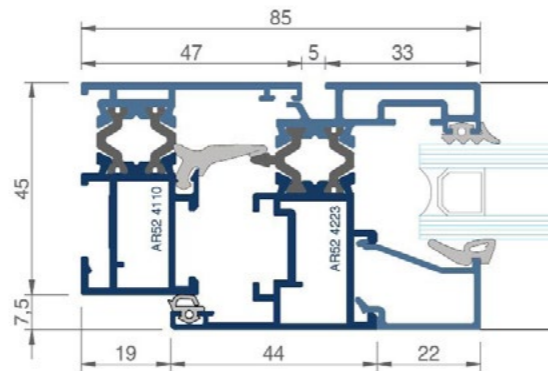
	THERMAL	Window $U_w = 1.56 \text{ W/m}^2\text{k}^*$ * Based on EN 10077-02 1.5x2.4 m balcony door glass $U_g=1.1 \psi=0.053$
	ACOUSTICS	Estimated sound attenuation up to Rw 40 dB. Window size: 1.23 m x 1.45 m with acoustic laminated glass of 4.4/cam/4.4A

TEST RESULTS

	Air permeability 4
	Watertightness Window: 9A Balcony door: 6A
	Wind resistance Window: C4 Balcony door: C2

Results of official tests performed on ENSATEC® 212454 and 212466 and on the basis of Annex E of standard EN-14351-1:2006

CROSS-SECTION



CASEMENT / Thermia® AR52 CE

Quality seals



Qualanod seal for anodization
License number: 1014



Qualicoat seal for lacquer
License number: 405



Qualideco seal for imitation wood
License number: ES-0009F

Certification



THERMIA BARCELONA
EN14351-1:2006+A2:2016

Thermia® AR62 CE

Guaranteed savings and well-being

SERIES FEATURES	
Thermal break	Yes / 24 mm
Main frame	55 mm
Main leaf	62 mm
General thickness of the profiles	1.5 -1.6 mm
Maximum casement glazing	37 mm
Maximum casement leaf weight	90 Kg
Tilt and turn leaf maximum weight	130 Kg
Available profiles	Window / Door

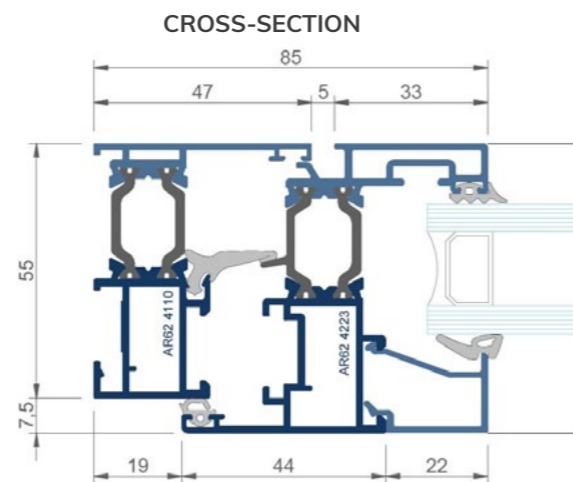


	THERMAL	Window $U_w = 1.46W/m^2k$ * * Based on EN10077-02 Single-leaf 1.5x2.4 m balcony door glass $U_g=1.1$ $\psi=0.053$
	ACOUSTICS	Estimated sound attenuation up to Rw 42 dB . Window size: 1.23 m x 1.45 m with acoustic laminated glass of 4.4/cam/4.4A

TEST RESULTS

	Air permeability 4
	Watertightness Window: E1050 Balcony door: 8A
	Wind resistance Window: C5 Balcony door: C2

Results of official tests performed on ENSATEC® 212454 and 212466 and on the basis of Annex E of standard EN-14351-1:2006



Quality seals



Qualanod seal for anodization
License number: 1014



Qualicoat seal for lacquer
License number: 405



Qualideco seal for imitation wood
License number: ES-0009F

Certification



THERMIA BARCELONA
EN14351-1:2006+A2:2016

Thermia® AR78+ CE

The solution for the most demanding clients

SERIES FEATURES	
Thermal break	Yes / 24 mm
Main frame	70 mm
Main leaf	78 mm
General thickness of the profiles	1.5 -1.8 mm
Maximum casement glazing	49 mm
Maximum casement leaf weight	90 Kg
Tilt and turn leaf maximum weight	130 Kg
Available profiles	Window / Door

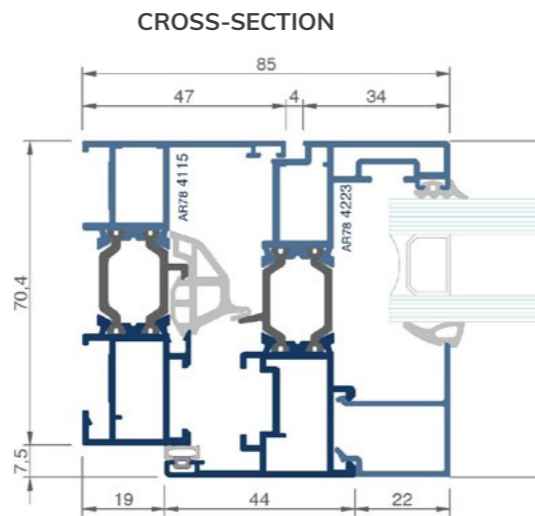


	THERMAL	Window $U_w = 1.07 \text{ W/m}^2\text{k}^*$ * Based on EN10077-02 Single-leaf 1.7x2.6 m balcony door glass $U_g=0.7 \Psi= 0.046$
	ACOUSTICS	Estimated sound attenuation up to Rw 45 dB . Window size: 1.23 m x 1.45 m with acoustic laminated glass of 4.4/cam/4.4A

TEST RESULTS

	Air permeability 4
	Watertightness E1050
	Wind resistance Window: C5 Balcony door: C4

Results of official tests performed on Applus® and on the basis of Annex E of standard EN-14351-1:2006



Quality seals



Qualanod seal for anodization
License number: 1014



Qualicoat seal for lacquer
License number: 405



Qualideco seal for imitation wood
License number: ES-0009F

Certification



THERMIA BARCELONA
EN14351-1:2006+A2:2016

Thermia® OC78 LUMIA

The importance of light

SERIES FEATURES	
Thermal break	Yes / 24 mm
Main frame	70 mm
Main leaf	66 mm
General thickness of the profiles	1.4 mm - 1,5 mm
Maximum casement glazing	30 mm
Maximum casement leaf weight	160 Kg / leaf
Tilt and turn leaf maximum weight	160 Kg / leaf
Available profiles	Window / Door



	THERMAL	Window $U_w = 1.30 \text{ W/m}^2\text{k}^*$ * Based on EN10077-02 1.2x2.4 mm window glass $U_g = 1.0 \psi = 0.053$
	ACOUSTICS	Estimated sound attenuation up to Rw 41 dB . Window size: 1.23 m x 1.45 m with acoustic laminated glass of 44/cam/44.1

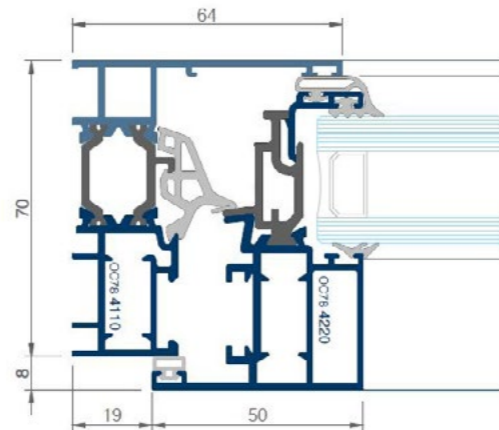


TEST RESULTS

- Air permeability **4**
- Watertightness **E750**
- Wind resistance
Window: **C5** Balcony door: **C1**

Results of test reports at ENSATEC® lab, document no. 250711, and based on Annex of standard EN 14351 - 1:2006+A2:2016

CROSS-SECTION



Quality seals



Qualanod seal for anodization
License number: 1014



Qualicoat seal for lacquer
License number: 405



Qualideco seal for imitation wood
License number: ES-0009F

Certification

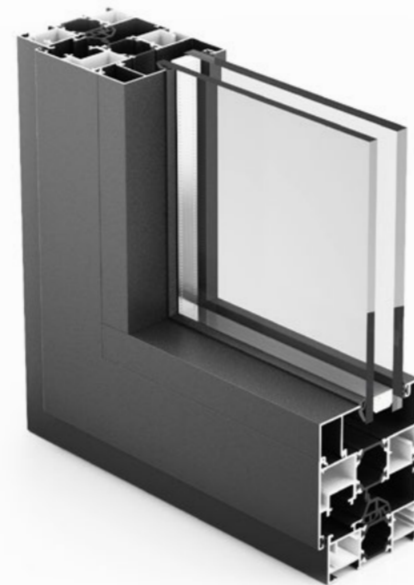


THERMIA BARCELONA
EN14351-1:2006+A2:2016

Thermia® AR78+ C16

More light
with less aluminum

SERIES FEATURES	
Thermal break	Yes / 14 mm
Main frame	70 mm
Main leaf	78 mm
General thickness of the profiles	1.5 mm
Maximum casement glazing	49 mm
Maximum casement leaf weight	90 kg / door 100 kg
Tilt and turn leaf maximum weight	100 Kg
Available profiles	Window / Door



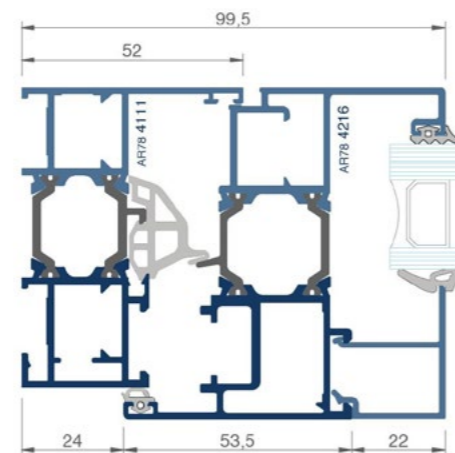
	THERMAL Window $U_w = 1.17/m^2k^*$ * Based on EN 10077-02 Single-leaf 1.7x2.6 balcony door glass $U_g = 0.7 \psi = 0.046$
	ACOUSTICS Estimated sound attenuation up to Rw 45 dB . Window size: 1.23 m x 1.45 m with acoustic laminated glass of 4.4/cam/4.4A

TEST RESULTS

	Air permeability 4
	Watertightness Window: E1050 Balcony door: E2100
	Wind resistance Window: C5 Balcony door: C4

Results of official tests performed on Applus® and on the basis of Annex E of standard EN-14351-1:2006

CROSS-SECTION



Thermia® OC78+ C16

More light
with less aluminum

SERIES FEATURES	
Thermal break	Yes / 32 mm
Main frame	70 mm
Main leaf	66 mm
General thickness of the profiles	1.5 mm
Maximum casement glazing	28 mm
Maximum leaf weight	100 Kg
Available profiles	Window



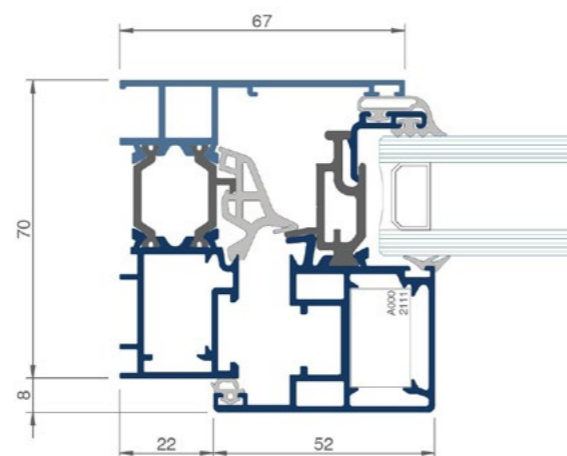
	THERMAL	Window $U_w = 1.47/m^2k^*$ * Based on EN 10077-02 Single-pane 1.2x2.4 balcony door glass $U_g = 1,1 \psi = 0,053$
	ACOUSTICS	Estimated sound attenuation up to Rw 41 dB . Window size: 1.23 m x 1.45 m with acoustic laminated glass of 4.4/cam/4.4A

TEST RESULTS

	Air permeability 4
	Watertightness E1200
	Wind resistance Window: C5 Balcony door: C1

Results of official tests performed on Applus® and on the basis of Annex E of standard EN-14351-1:2006

CROSS-SECTION



CASEMENT / Thermia® OC78+ C16

Quality seals



Qualanod seal for anodization
License number: 1014



Qualicoat seal for lacquer
License number: 405



Qualideco seal for the imitation wood
License number: ES-0009F

Certification



THERMIA BARCELONA
EN14351-1:2006+A2:2016

Thermia® CF22

Design and comfort for everyone

SERIES FEATURES	
Thermal break	No
Main frame	35 mm
Main leaf	22 mm
General thickness of the profiles	1.2 mm
Maximum glazing	8 mm / 15 mm
Maximum leaf weight	80 Kg
Track option	2 tracks
90° frameless "KISS" closure solution	No
Available profiles	Window / Door



ACOUSTICS

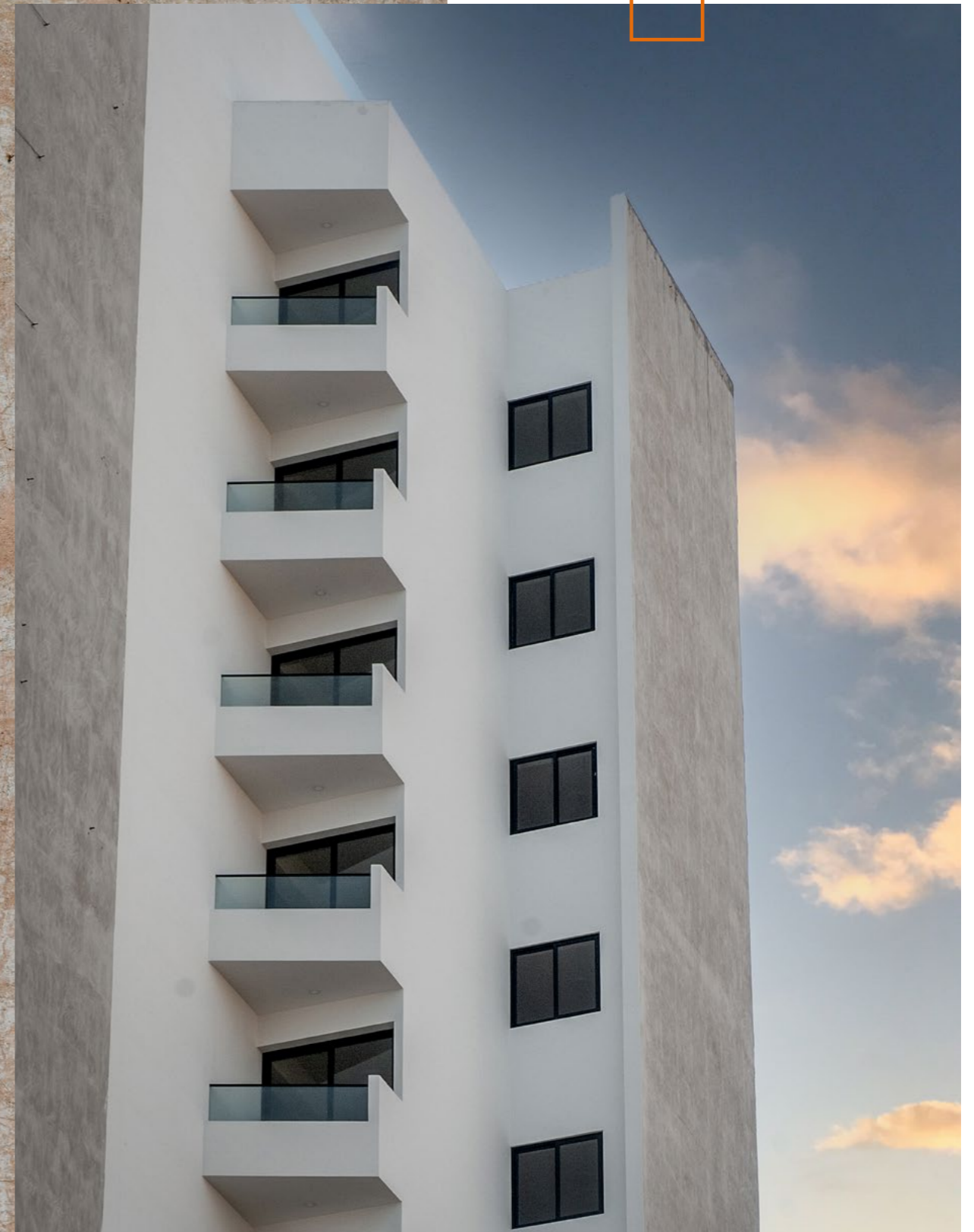
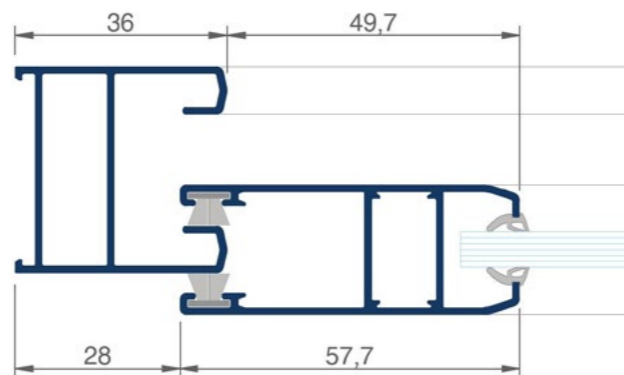
Estimated sound attenuation up to **Rw 33 dB**.
Window size: 1.23 m x 1.45 m with acoustic laminated glass of 6.6

TEST RESULTS

-  Air permeability **2**
-  Watertightness **4A**
-  Wind resistance **C2**

Results of official tests performed on Applus® 15/10169-752 and on the basis of Annex E of standard EN-14351-1:2006

CROSS-SECTION



Quality seals



Qualanod seal for anodization
License number: 1014



Qualicoat seal for lacquer
License number: 405



Qualideco seal for the imitation wood
License number: ES-0009F

Certification



THERMIA BARCELONA
EN14351-1:2006+A2:2016

Thermia® CF26

Extraordinarily versatile windows

SERIES FEATURES	
Thermal break	No
Main frame	65 mm
Main leaf	26 mm
General thickness of the profiles	1.3 mm
Maximum glazing	10 mm / 17 mm
Maximum leaf weight	120 Kg
Track option	2,3,4 or more tracks
90° frameless "KISS" closure solution	No
Available profiles	Window / Door






ACOUSTICS

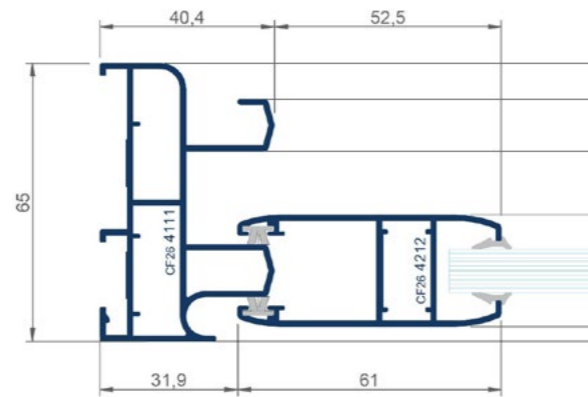
Estimated sound attenuation up to Rw **36 dB**.
Window size: 1.23 m x 1.45 m with acoustic laminated glass of 44.A/cam/44.A



TEST RESULTS

-  Air permeability **3**
-  Watertightness
Window: **5A** Balcony door: **3A**
-  Wind resistance
Window: **C4** Balcony door: **C2**

CROSS-SECTION



Results of internal tests performed on ENSATEC® on the basis of Annex E of standard EN-14351-1:2006

Quality seals



Qualanod seal for anodization
License number: 1014



Qualicoat seal for lacquer
License number: 405



Qualideco seal for the imitation wood
License number: ES-0009F

Certification



THERMIA BARCELONA
EN14351-1:2006+A2:2016

Thermia® CF31

Enjoy the outdoors without sacrificing silence

SERIES FEATURES




Thermal break	No
Main frame	75 mm
Main leaf	31 mm
General thickness of the profiles	1.5 mm
Maximum glazing	10 mm - 21 mm
Maximum leaf weight	160 Kg
Track option	2,3,4 or more tracks
90° frameless "KISS" closure solution	Yes
Available profiles	Window / Balcony Door



ACOUSTICS

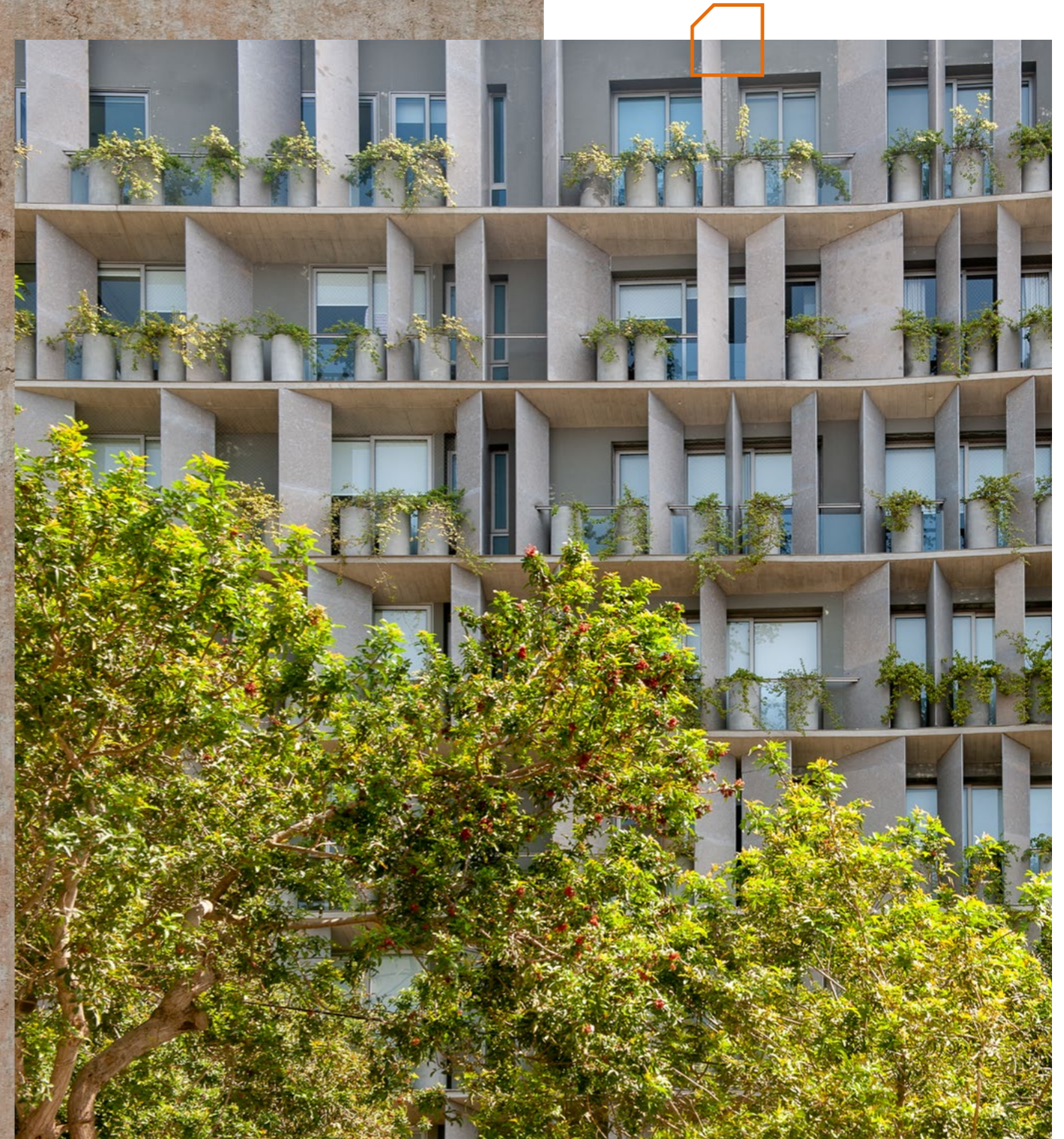
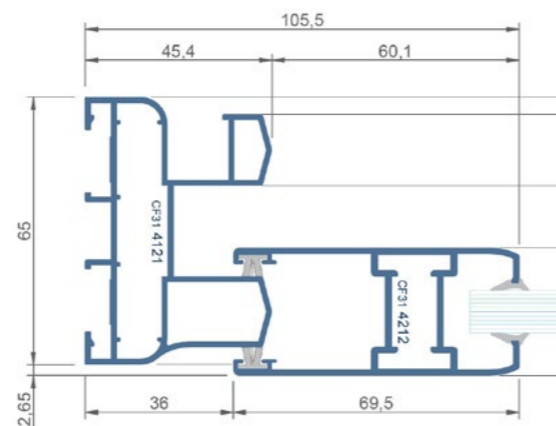
Estimated sound attenuation up to **Rw 36 dB**.
Window size: 1.23 m x 1.45 m with acoustic laminated glass of 4.4/cam/4.4A

TEST RESULTS

-  Air permeability **3**
-  Watertightness
Window: **6A** Balcony door: **4A**
-  Wind resistance
Window: **C5** Balcony door: **B1**

Results of tests performed on ENSATEC® on the basis of Annex E of standard EN-14351-1:2006

CROSS-SECTION



Quality seals



Qualanod seal for anodization
License number: 1014



Qualicoat seal for lacquer
License number: 405



Qualideco seal for the imitation wood
License number: ES-0009F

Certification



THERMIA BARCELONA
EN14351-1:2006+A2:2016

Thermia® CF40 VERSIA

Design, versatility,
and imagination

SERIES FEATURES	
Thermal break	No
Main frame	65 mm
Main leaf	40 mm
General thickness of the profiles	1.4 mm - 1.6 mm
Maximum glazing	28 mm
Maximum leaf weight	160 Kg - 200 Kg
Track option	2, 3 or more tracks
90° frameless "KISS" closure solution	Yes
Pocket solution	Yes
Available profiles	Window / Balcony Door



ACOUSTICS

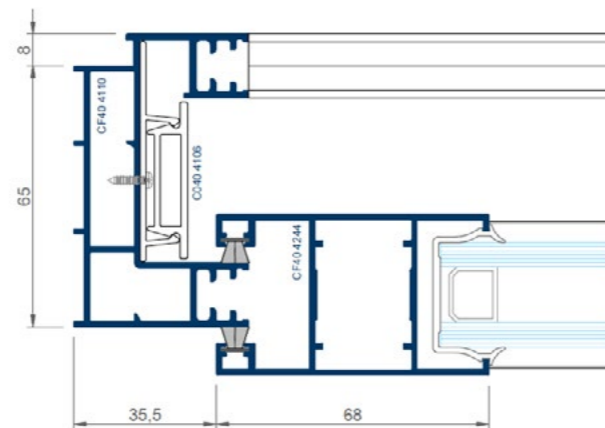
Estimated sound attenuation up to **Rw 39 dB**.
Window size: 1.23 m x 1.45 m with acoustic laminated glass of 4.4/cam/4.4A

TEST RESULTS

- Air permeability **4**
- Watertightness **7A**
- Wind resistance
Window: **C2** Balcony door: **C5**

Results of official tests performed on Ensatec 244728 and on the basis of Annex E of standard EN-14351-1:2006

CROSS-SECTION



Quality seals



Qualanod seal for anodization
License number: 1014



Qualicoat seal for lacquer
License number: 405



Qualideco seal for imitation wood
License number: ES-0009F

Certification



THERMIA BARCELONA
EN14351-1:2006+A2:2016



Windows for a better life

Thermia® CR31

Windows to bring together the indoors and the outdoors

SERIES FEATURES	
Thermal break	Yes 14 mm - 24 mm
Main frame	75 mm
Main leaf	31 mm
General thickness of the profiles	1.5 mm
Maximum glazing	24 mm
Maximum leaf weight	160 Kg
Track option	2,3,4 or more tracks
90° frameless "KISS" closure solution	Yes
Available profiles	Window / Balcony Door



	THERMAL	Window $U_w = 1.79 \text{ W/m}^2\text{k}^*$ * Based on EN 10077-02 2.8x2.2 balcony door glass $U_g = 1.1 \psi = 0.053$
	ACOUSTICS	Estimated sound attenuation up to Rw 37 dB. Window size: 1.23 m x 1.45 m with acoustic laminated glass of 4.4/cam/4.4A

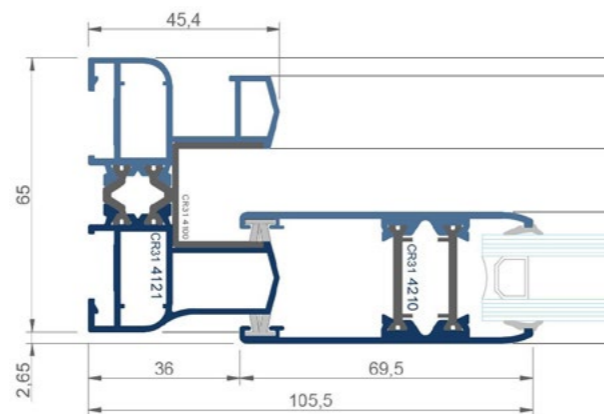


TEST RESULTS

	Air permeability 3
	Watertightness Window: 6A Balcony door: 4A
	Wind resistance Window: C5 Balcony door: B1

Results of official tests performed on Ensatec 232625 and 232626 and on the basis of Annex E of standard EN-14351-1:2006

CROSS-SECTION



Quality seals



Qualanod seal for anodization
License number: 1014



Qualicoat seal for lacquer
License number: 405



Qualideco seal for the imitation wood
License number: ES-0009F

Certification





THERMIA BARCELONA
EN14351-1:2006+A2:2016

Thermia® CR40 VERSIA




The basic, effective window

SERIES FEATURES	
Thermal break	Yes, 24 mm
Main frame	65 mm
Main leaf	40 mm
General thickness of the profiles	1.4 mm / 1.6 mm
Maximum glazing	28 mm
Maximum leaf weight	200 Kg
Track option	2, 3 or more tracks
90° frameless "KISS" closure solution	Yes
Pocket solution	1,2 and 3 leaves
Available profiles	Window / Balcony Door



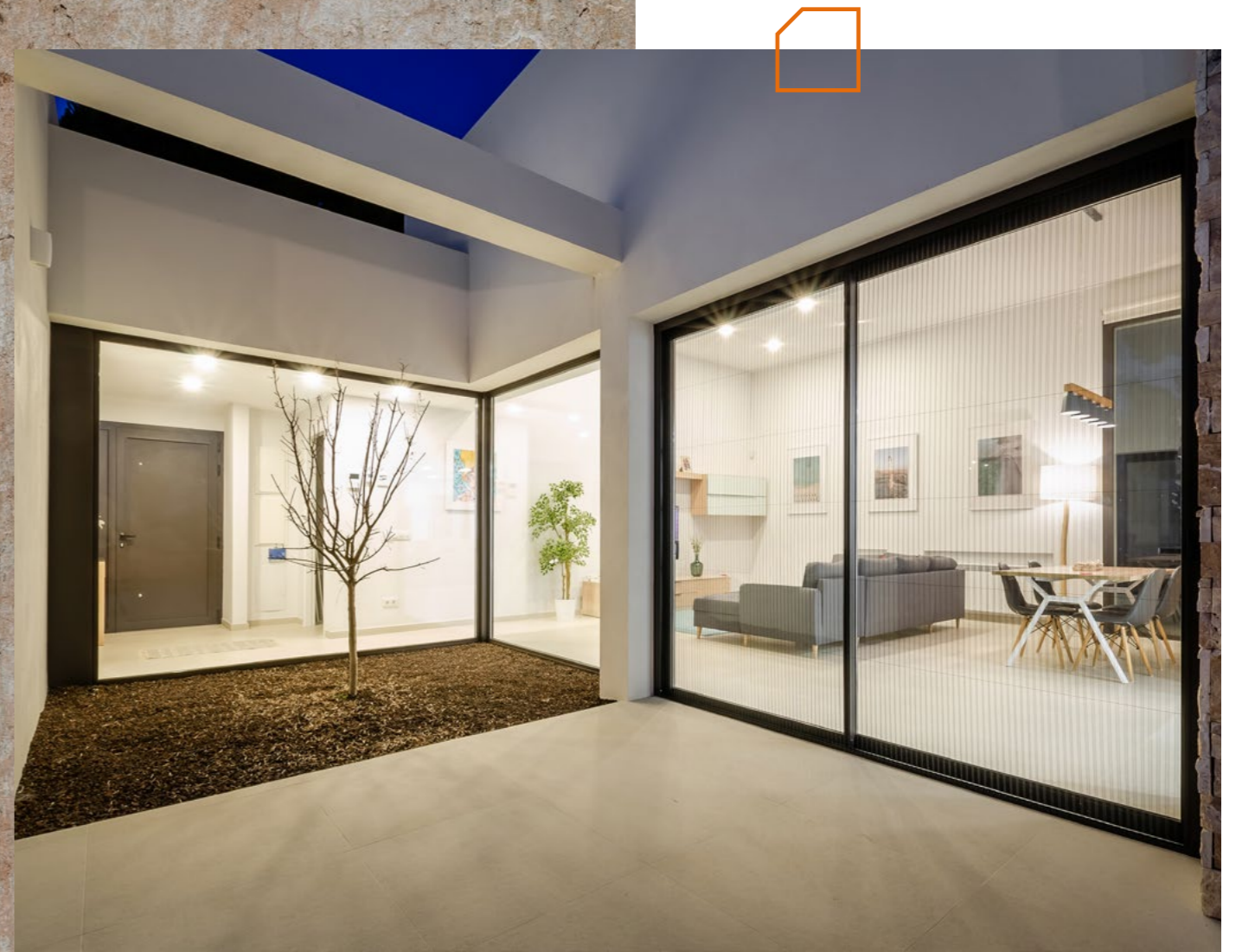
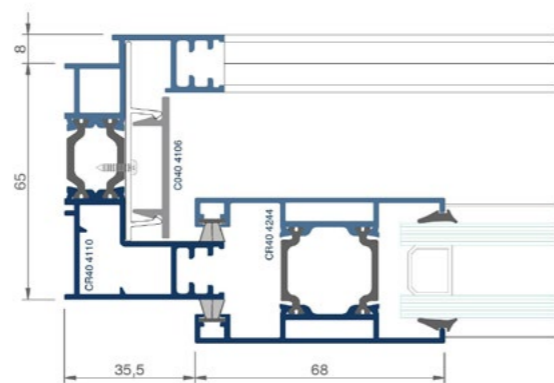
	THERMAL	Window $U_w = 1.58 \text{ W/m}^2\text{k}^*$ * Based on EN 10077-02 3.2x2.4 balcony door glass $U_g = 1.1 \psi = 0.053$
	ACOUSTICS	Estimated sound attenuation up to $R_w 40 \text{ dB}$. Window size: 1.23 m x 1.45 m with acoustic laminated glass of 4.4/cam/4.4A

TEST RESULTS

	Air permeability 4
	Watertightness 6A
	Wind resistance Window: C2 Balcony door: C5

Results of official tests performed on ENSATEC® 244728 and on the basis of Annex E of standard EN-14351-1:2006

CROSS-SECTION



SLIDING / Thermia® CR40 VERSIA

Quality seals



Qualanod seal for anodization
License number: 1014



Qualicoat seal for lacquer
License number: 405



Qualideco seal for the imitation wood
License number: ES-0009F

Certification



THERMIA BARCELONA
EN14351-1:2006+A2:2016

Thermia® CR46 MAGNA

Connect with the outdoors

SERIES FEATURES	
Thermal break	Yes / 24 mm
Main frame	65 mm
Main leaf	46 mm
General thickness of the profiles	1.6 mm
Maximum glazing	34 mm
Maximum leaf weight	300 Kg / leaf
Track option	2, 3 or more tracks
90° frameless "KISS" closure solution	Yes
Available profiles	Window / Balcony Door



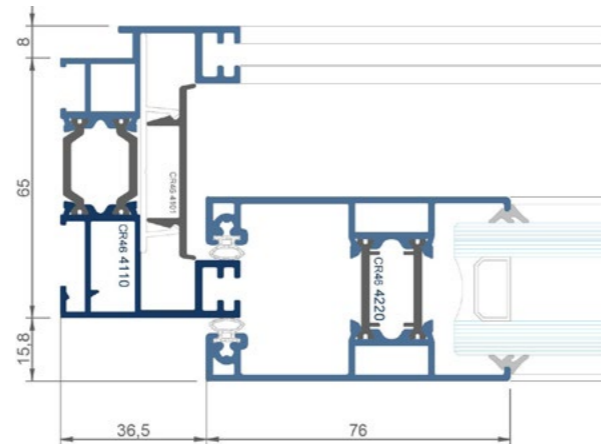
	THERMAL	Window $U_w = 1.60 \text{ W/m}^2\text{k}^*$ * Based on EN 10077-02 Balcony Door 3.2 x 2.4 glass $U_g = 1.00 \psi = 0.053$
	ACOUSTICS	Estimated sound attenuation up to $R_w \text{ 38 dB}$. Window size: 1.23 m x 1.45 m with acoustic laminated glass of 44.A/cam/44.A

TEST RESULTS

	Air permeability 4
	Watertightness 7A
	Wind resistance Window: C5 Balcony door: C3

Results of test reports at ENSATEC lab, document no. 250712, and based on Annex of standard EN 14351 - 1:2006+A2:2016

CROSS-SECTION



SLIDING / Thermia® CR46 MAGNA

Quality seals



Qualanod seal for anodization
License number: 1014



Qualicoat seal for lacquer
License number: 405



Qualideco seal for imitation wood
License number: ES-0009F

Certification

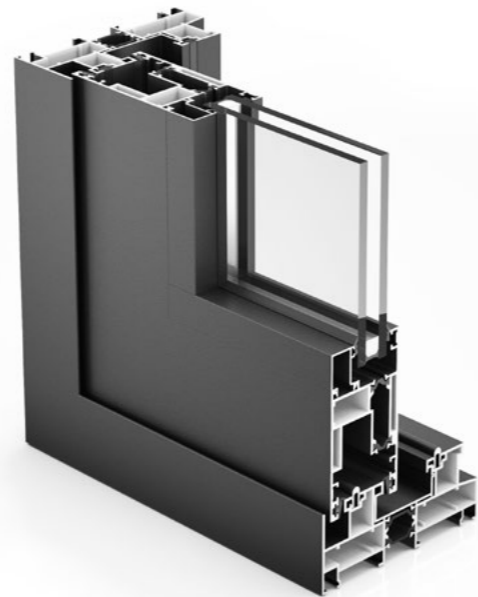




THERMIA BARCELONA
EN14351-1:2006+A2:2016

Thermia® ER52

Size is not a problem

SERIES FEATURES	
Thermal break	Yes 14 mm - 24 mm
Main frame	125 mm
Main leaf	52 mm
General thickness of the profiles	1.8 mm
Maximum glazing	30 mm
Maximum leaf weight	400 Kg / leaf
Track option	2 or 3 tracks
90° frameless "KISS" closure solution	No
Available profiles	Window / Balcony Door



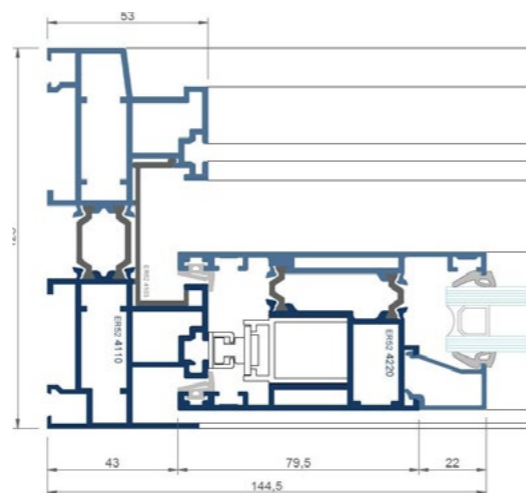
	THERMAL	Window $U_w = 1.84 \text{ W/m}^2\text{k}^*$ * Based on EN 10077-02 4.5x2.8 balcony door glass $U_g = 1.1 \psi = 0.053$
	ACOUSTICS	Estimated sound attenuation up to Rw 44 dB. Window size: 1.23 m x 1.45 m with acoustic laminated glass of 4.4/cam/4.4A

TEST RESULTS

-  Air permeability **4**
-  Watertightness **7A**
-  Wind resistance **C3**

Results of official tests performed on Applus® 10/323000370 - 09/32302504 - 09/32302670 and on the basis of Annex E of standard EN-14351-1:2006

CROSS-SECTION



Qualanod seal for anodization
License number: 1014



Qualicoat seal for lacquer
License number: 405



Qualideco seal for imitation wood
License number: ES-0009F



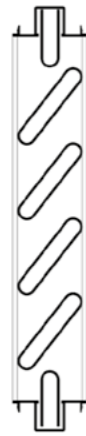
THERMIA BARCELONA
EN14351-1:2006+A2:2016

Thermia® PM40 SHUTTER

Mediterranean style

Fixed slat shutter

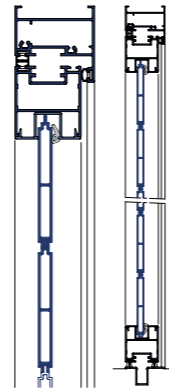
The solution for sun protection and ventilation, protecting the privacy of guests.



Closure with casement shutter and fixed slats.

Blind slat shutter

The solution for achieving a totally opaque and reinforced surface. Allows no light to enter.



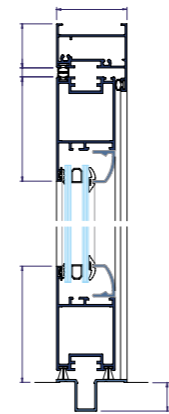
Closure with blind slats, ideal for shutting out light and visibility.

Movable slats shutter

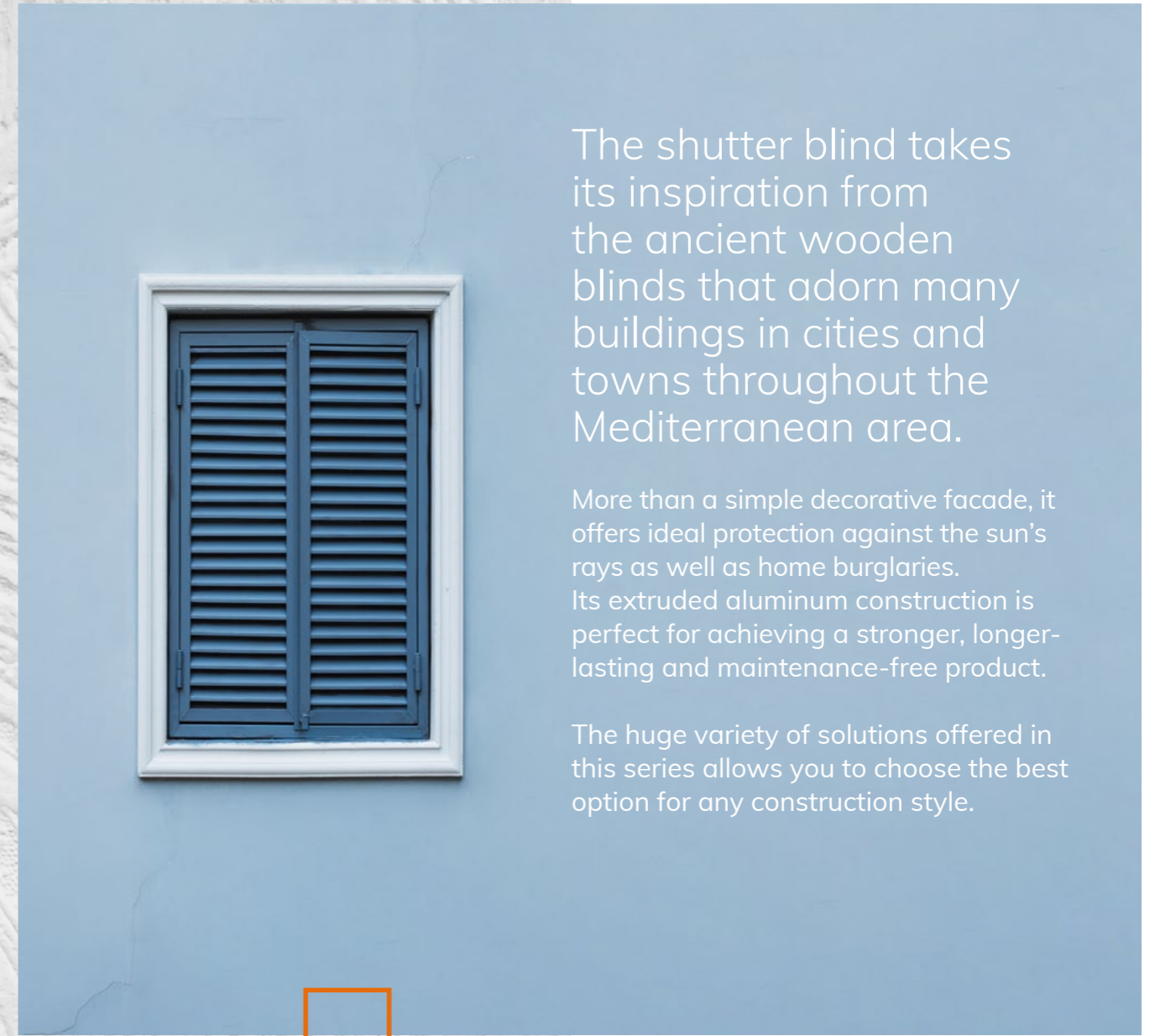
Slat position can be adjusted, allowing the user to position them as desired at any time.



Shutter folding closure with movable slats.



Shutter folding closure with 5 glass panels.



The shutter blind takes its inspiration from the ancient wooden blinds that adorn many buildings in cities and towns throughout the Mediterranean area.

More than a simple decorative facade, it offers ideal protection against the sun's rays as well as home burglaries. Its extruded aluminum construction is perfect for achieving a stronger, longer-lasting and maintenance-free product.

The huge variety of solutions offered in this series allows you to choose the best option for any construction style.



Shutters, sun protection & security



Windows for a better life

Diseño
Confort
Silencio

Thermia SHUTTER®

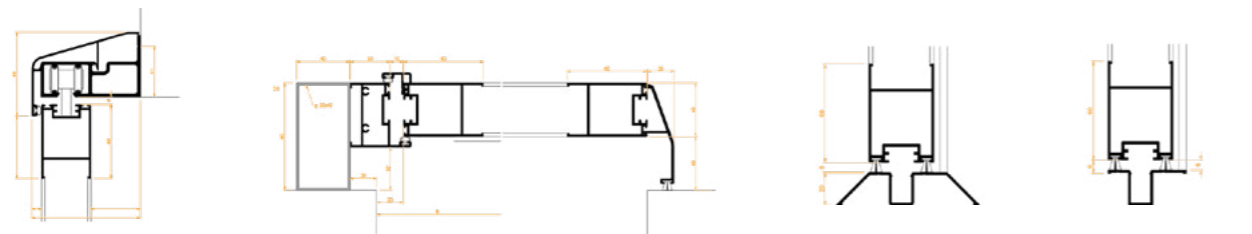
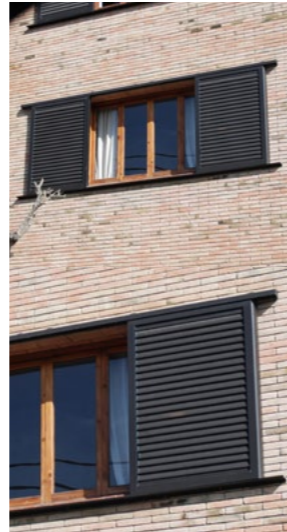
OPENING SYSTEMS

1 Sliding shutter system

- + The sliding shutter blind is the perfect solution for sun protection on the facade of a building.
- + Its lateral movement allows for the fabrication of 1, 2, or more panels, with multiple tracks.
- + The wall guide is manufactured with a decorative cover for a more elegant look.
- + The ability to slide all the panels laterally means that the window opening can be left completely unobstructed.



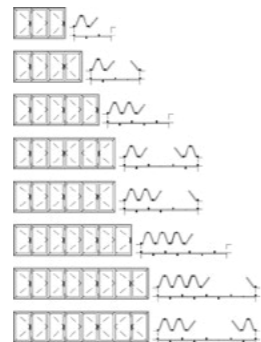
Single Panel Double Panel



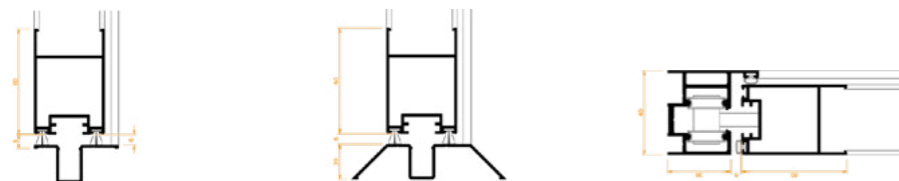
Wall guide with decorative cover Cross-section 1 panel Overlapping lower guide Recessed lower guide

2 Folding shutter system

- + The ideal closure for restaurants, bars, pool areas, meeting rooms, etc.
- + Either glass or slats can be mounted in its frames.
- + Multiple combinations (Fig. 1)



(fig.1)

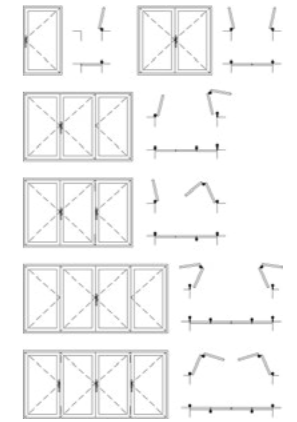


Recessed lower guide Overlapping lower guide Upper ceiling guide

Windows for a better life

3 Casement shutter system

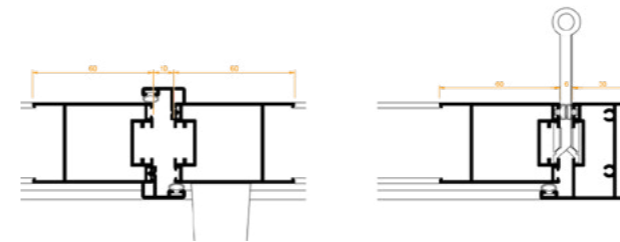
- + The leaf rotates to an open position on a vertical axis, using hinges.
- + Allows for up to 4 leaves to be installed, with different opening solutions.
- + Combinations (Fig. 2)
- + The panels can open to the outside or the inside, as needed.



(fig. 2)



Cross-section 1 leaf



Cross-section double leaf



The aluminum **shutter blind** series is ideal for:

- Decoration of the facade.
- Greater protection against robbery.
- Solar protection in buildings and residences.



Thermia® MQ22 Mosquito Screen

Protection from insects



A versatile system offering effective protection from mosquitos.

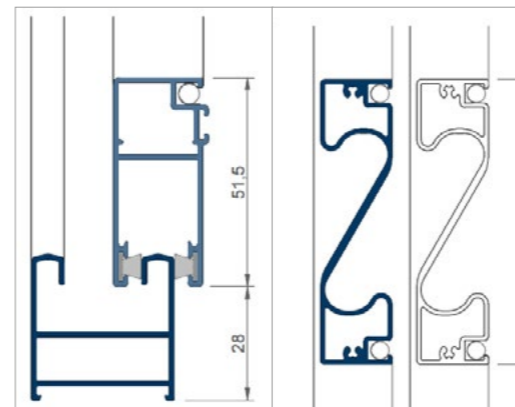
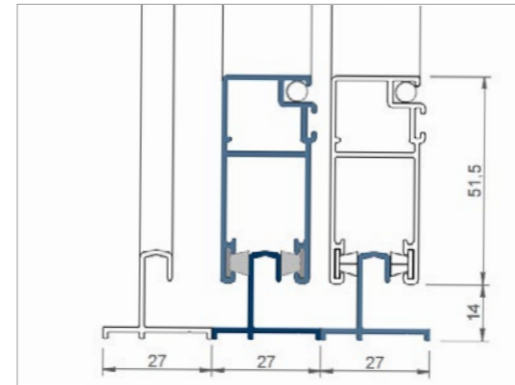
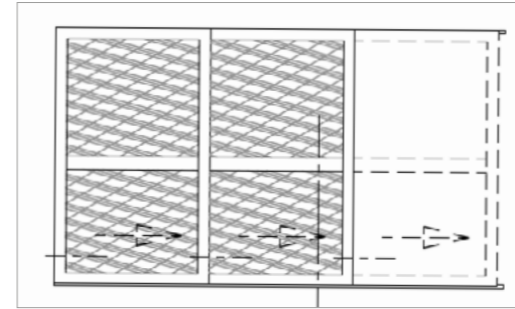
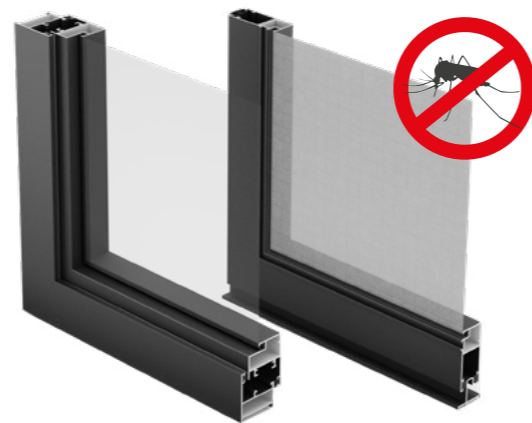
- + Casement, sliding, or fixed structure opening systems.
- + Manufactured with 1, 2, 3 or more panels.
- + Manufacture of large-format balcony doors.

Maximum robustness

A system of tubular profiles joined by machined corner joints on the profile and robust, high-quality components to ensure a long useful life.

100% Adaptable

This system is fully adaptable to all Thermia series and to any other window on the market.



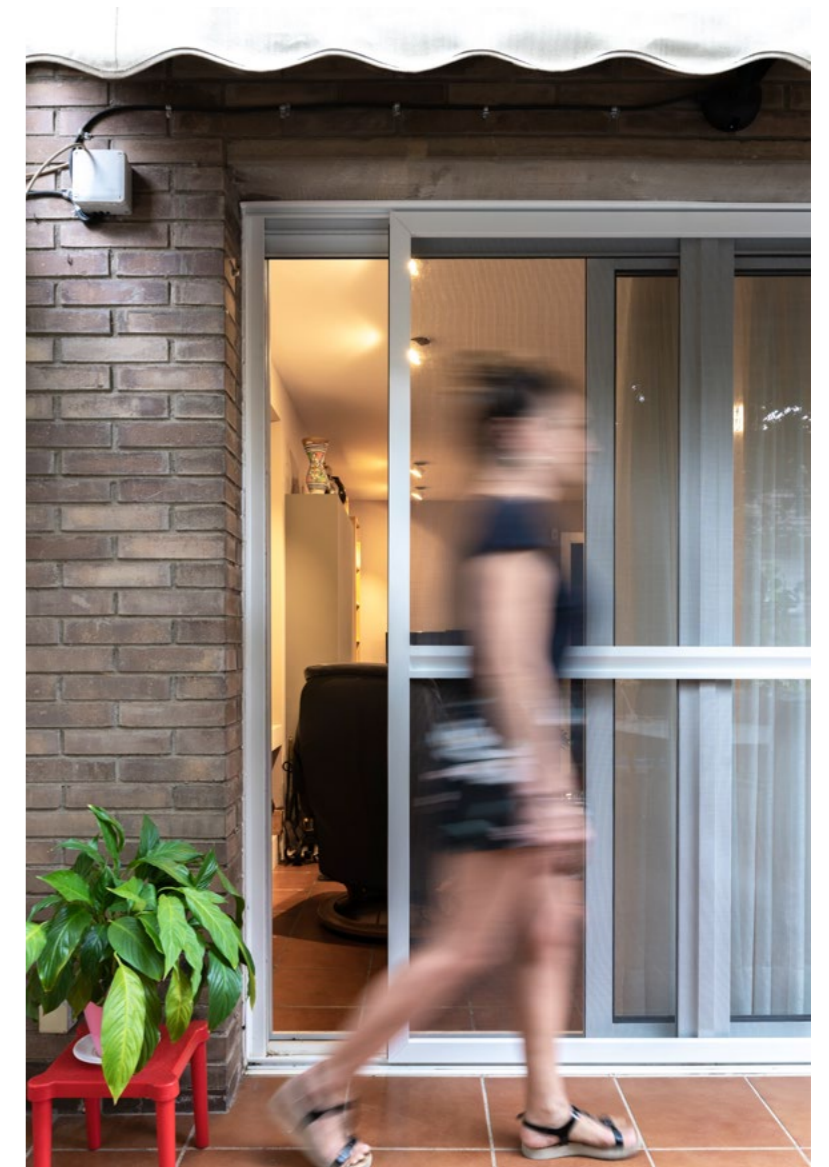
A **unique system** in the market for **large-format balcony doors**.

Easy to manufacture and install

Highly intuitive manufacture and installation. All you need are the same fixtures and accessories used with the Thermia Barcelona® windows series.

Impeccable aesthetics

Unlike most mosquito screen systems sold on the market, Thermia MQ22 uses aluminum corner joints on tubular profiles to create frames and panels joined at 45° (like a window), avoiding flimsy plastic components that deteriorate quickly.

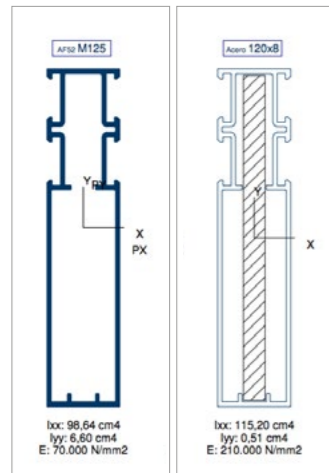


Thermia® AF52 MULLION

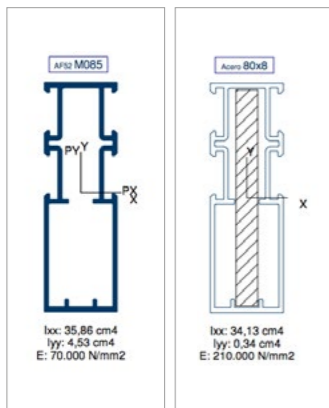
Light structural series

The Thermia® Series AF52M is a light structural system made up of 85 mm and 125 mm mullion, conceived for projects with different reinforcement requirements.

Inertias

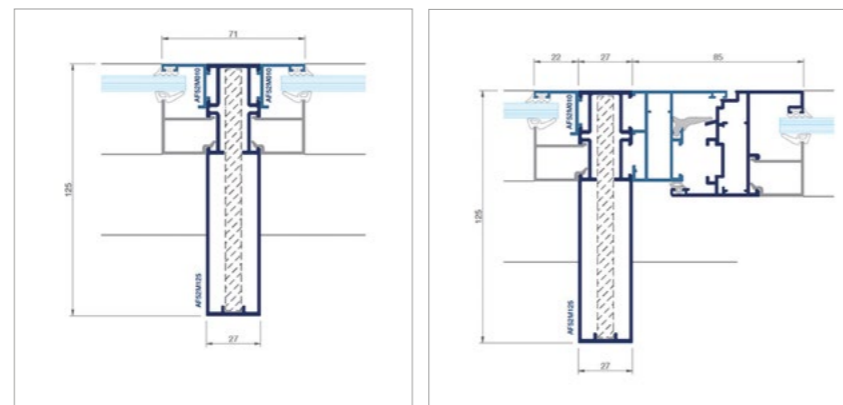


Non-reinforced Reinforced

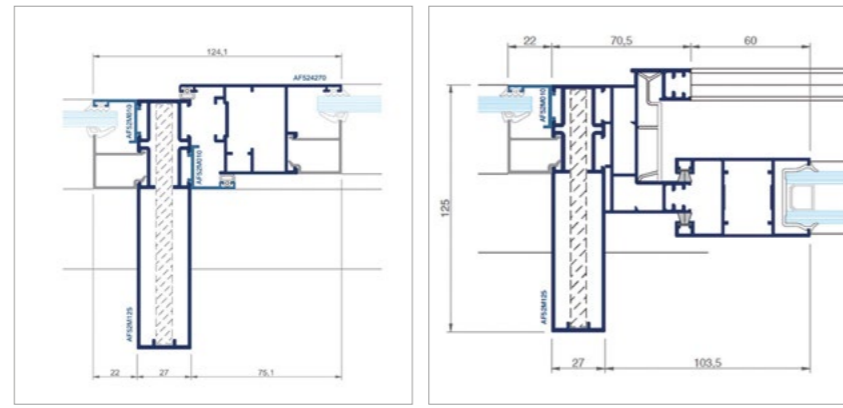


Non-reinforced Reinforced

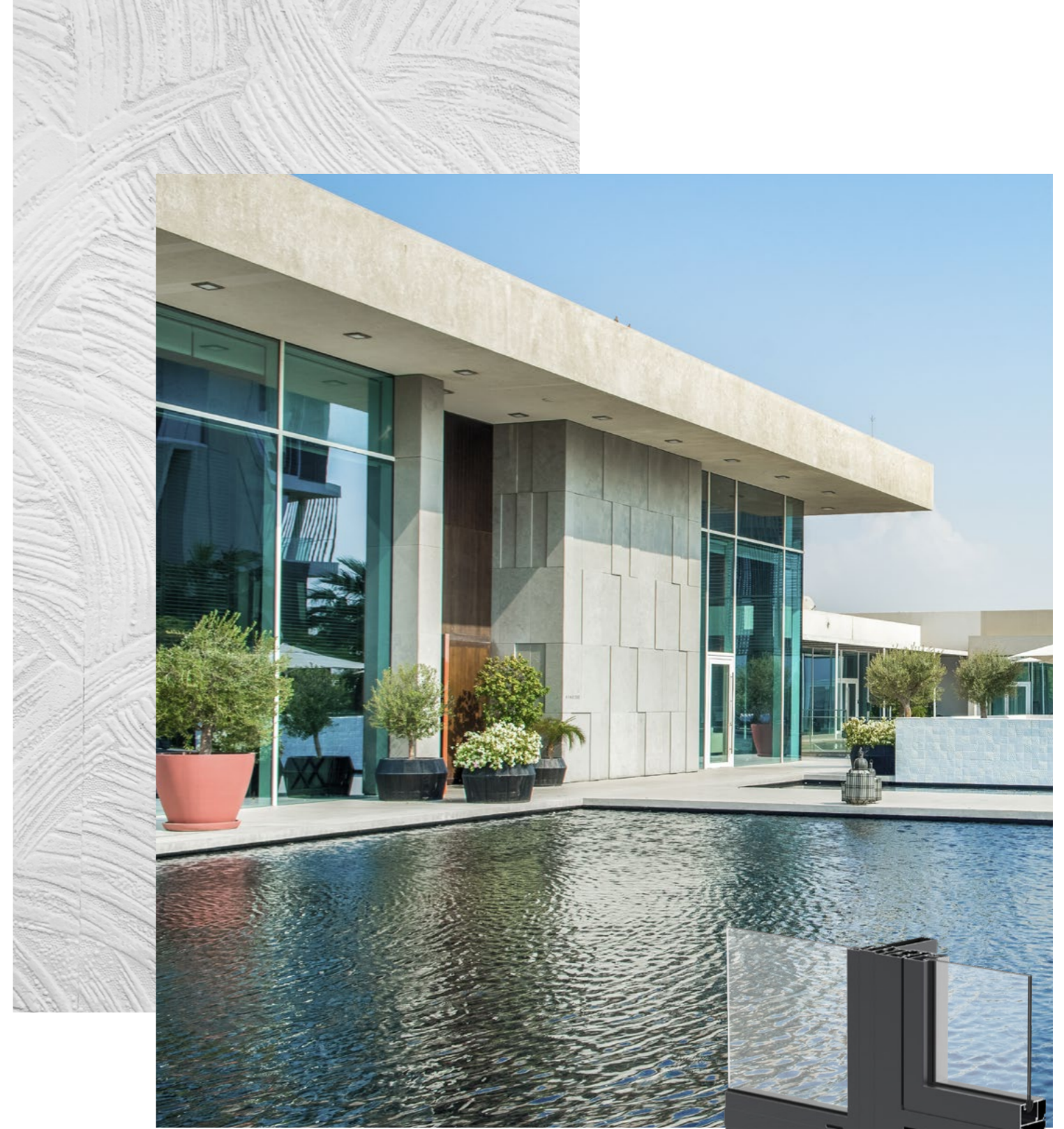
Cross-section



Cross-section fixed structure - fixed structure Cross-section fixed structure - inward opening



Cross-section fixed structure - outward opening Cross-section fixed structure - sliding opening



Technical features Thermia® AF52M Mullion

- + Compatible with the Thermia® AF52 series, an upright and crossbeam system measuring 85 mm and 125 mm.
- + Glass panels supported mechanically by the glazing beads of the Thermia system.
- + Wide range of glazing.
- + Ability to mount outward-opening leaf from the AF52 series.
- + Ability to attach any sliding or casement window from the Thermia system to the uprights.
- + Option of internal steel reinforcement to increase strength (ExY module).
- + Many combinations can be achieved by attaching a screw-on blade or glazing bead in multiple positions.




Thermia® FS45 QUICK

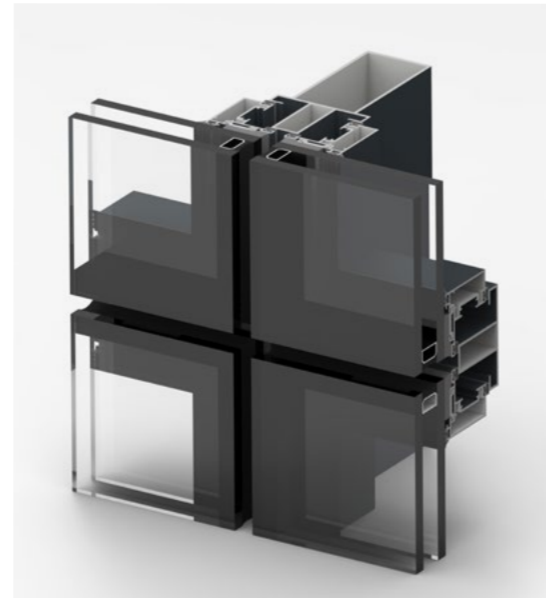
Quick, slender and practical walls

The Thermia® FS45 QUICK series is a system for creating glazed walls using aluminum for beautiful visual tempo.




PRESTACIONES DE LA SERIE	
Thermal break (TB)	No
Mullion	128/168 mm
Transom	65 mm
Leaf	42 mm
General thickness of the profiles	2,1 mm
Maximum leaf weight	130 Kg / leaf
Maximum glazing width	31 mm
Available profiles	Façade



THERMAL Window Ucw = **1,9 W/m²k***
*Based on EN 10077-02 2700 x 6200 façade glass Ug= 1.1 ψ= 0.053 (results obtained with the bonded insulated glass solution)

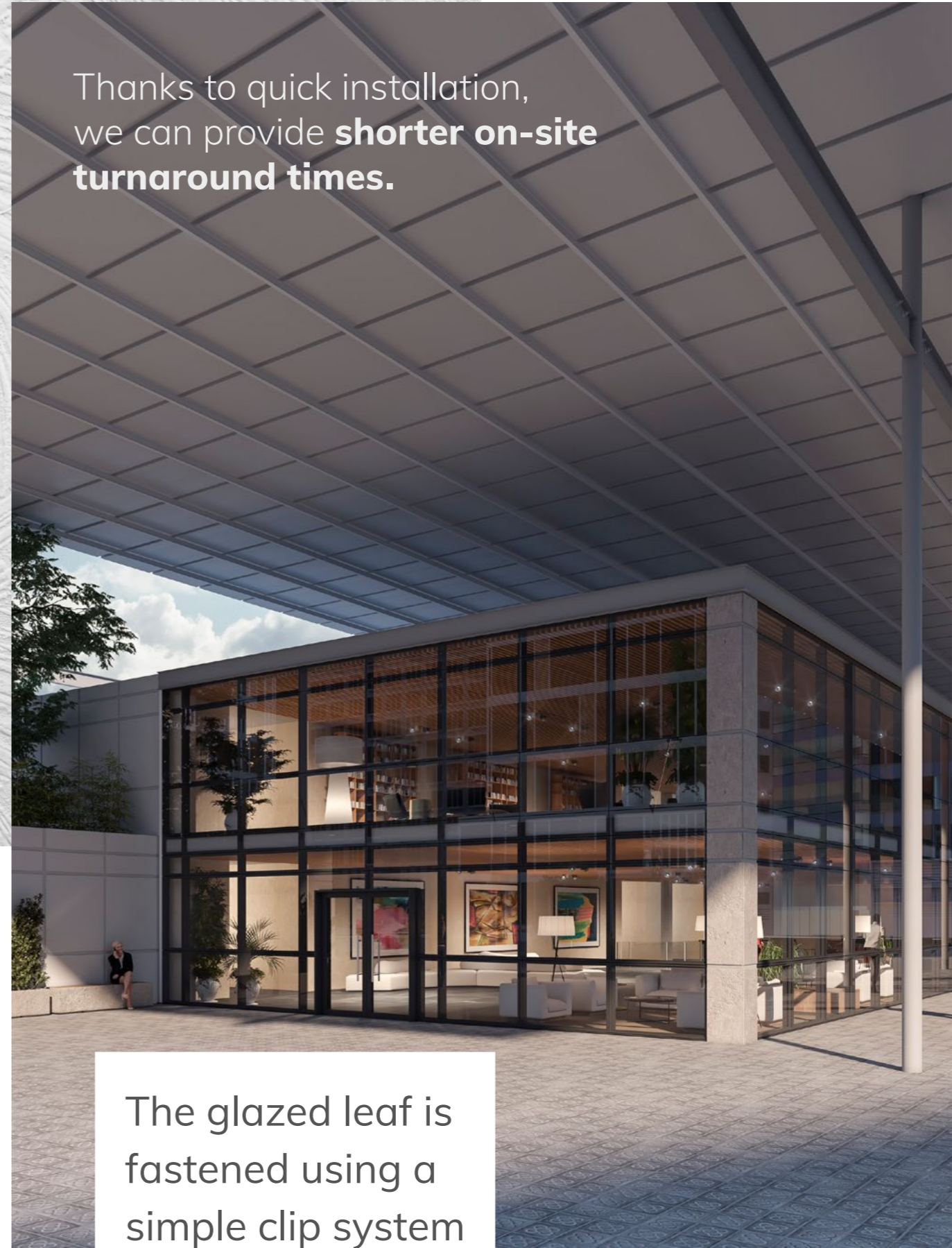
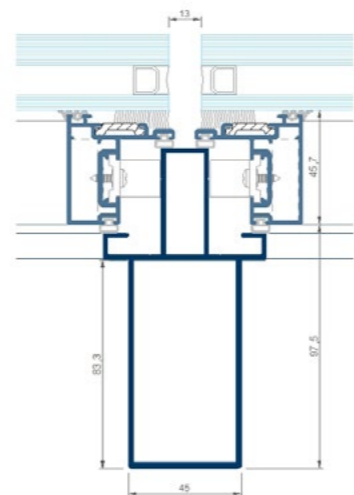


TEST RESULTS

-  Air permeability **AE1200**
-  Watertightness **R7**
-  Wind resistance **PASS**

Results obtained from reports according to ENSATEC with test number 251.064 and on the basis of the standards UNE-EN 13830:2016, UNE-EN 12153:2000, UNE-EN 12155:2000 and UNE-EN 12179:2001

CROSS-SECTION



LIGHT STRUCTURAL / Thermia® FS45 QUICK

Quality seals



Qualanod seal for anodization
License number: 1014



Qualicoat seal for lacquer
License number: 405



Qualideco seal for the imitation wood
License number: ES-0009F

Certification



THERMIA BARCELONA
EN14351-1:2006+A2:2016

Thermia® GR48 GLASS RAIL

Minimalist security



- Extrusion alloy**
- 6060.
- State of supply**
- T6 - T66.
- Dimensions**
- Profile depth 48 mm.
- Section view 115 mm.
- Construction options**
- On the floor.
- On the edge of the floor.
- Recessed.
- Glazing**
- 6+6 T (Butyral)
- 8+8 T (Butyral)
- 10+10 T (Butyral)

- Principal characteristics**
- CTE - DB SE-AE approval for all usage categories*.
- Double anti-lift system for glazing.
 - Protective seating for glass, with impact resistance and high load-bearing capacity.
 - Mechanical adjustment for leveling on the floor.
 - Compatible with alignment strings and connecting angles.
 - Integrated water drainage, caps and external anodic protection.



Quality seals

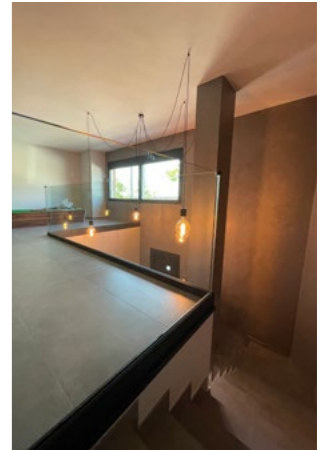

Qualanod seal for anodization
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THERMIA BARCELONA
EN14351-1:2006+A2:2016

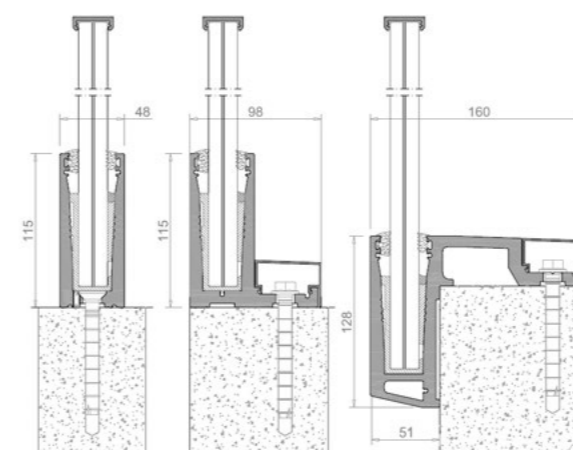


Tests

Usage categories

A1	A2	B	C1	C2
C3	C4	C5	E	F

Security testing:
CTE - DB SE-AE section 3.2.
Actions on handrails and dividing elements.



Performance

Usage categories certified for compliance with standards CTE-DB SE-AE

	6+6 // (T)	8+8 // (T)	10+10 // (T)
	✓ A,C1y2,D,G (Doc. 24387E) (1265mm altura)	✓ C3y4,E,F (Doc. 24387E) (1105mm altura) ✓ A,C1y2,D,G (Doc. 24387E) (1265mm altura)	✓ C5 (Doc. 24039E) (1105mm altura)
	✓ A,C1y2,D,G (Doc. 24387E) (1105mm altura)	✓ C3y4,E,F (Doc. 24387E) (1105mm altura) ✓ A,C1y2,D,G (Doc. 24387E) (1105mm altura)	✓ C3y4,E,F (Doc. 24387E) (1105mm altura)
	✓ A,C1y2,D,G (Doc. 24387E) (1105mm altura)	✓ C3y4,E,F (Doc. 24387E) (1105mm altura) ✓ A,C1y2,D,G (Doc. 24387E) (1105mm altura)	✓ C5 (Doc. 24039E) (1105mm altura) ✓ C3y4,E,F (Doc. 24387E) (1105mm altura) ✓ A,C1y2,D,G (Doc. 24387E) (1105mm altura)
	✓ A,C1y2,D,G (Doc. 24387E) (1105mm altura)	✓ C3y4,E,F (Doc. 24387E) (1105mm altura) ✓ A,C1y2,D,G (Doc. 24387E) (1105mm altura)	✓ C3y4,E,F (Doc. 24387E) (1105mm altura)

**Videte also laminado

NOTE 1:
Usage category C5 covers cases C3, C4, E and F.

NOTE 2:
Usage category C3 and 4, E, F covers cases A, C1, C2, D and G.

Thermia® RAILING

Safety & elegance

The wide variety of combinations of aluminum profiles and accessories make Thermia Barcelona® railing a safe, versatile and simple construction component that can be decorated with the same technologies used with the windows.



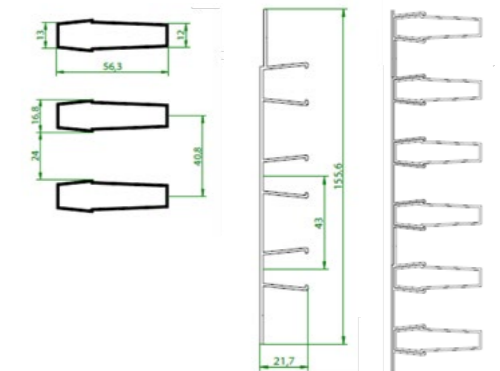
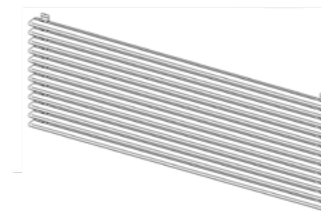
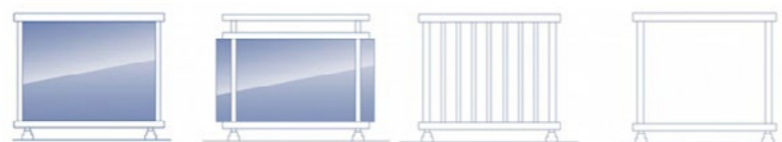
VELAM louver

Sun protection and ventilation

A ventilation and sun protection system for facades, using horizontally fastened slats. The surface can be treated with whatever color fits the architecture as a whole.



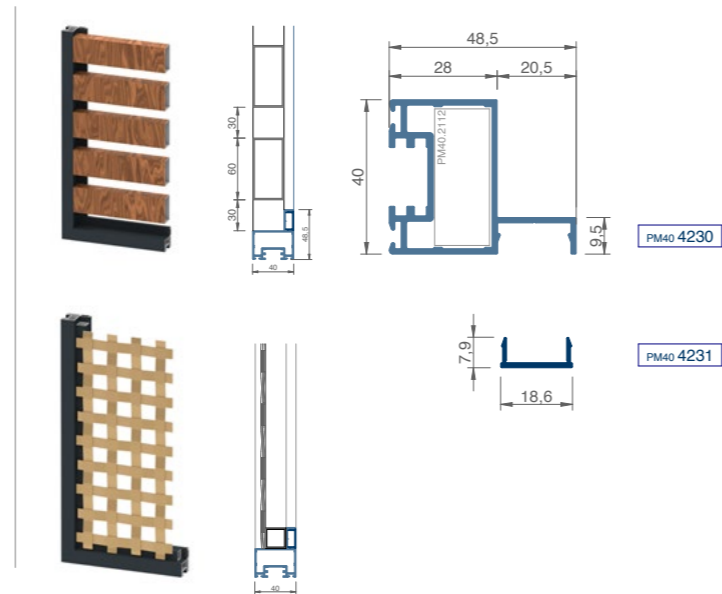
INSTALLATION OPTIONS



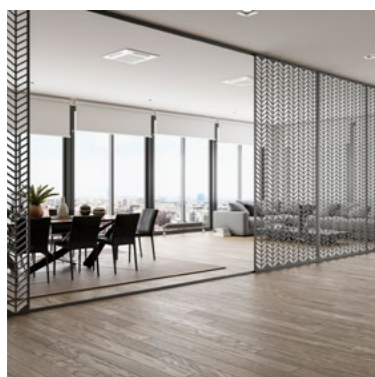
Thermia® PM40 DECOR

Shadows as construction elements

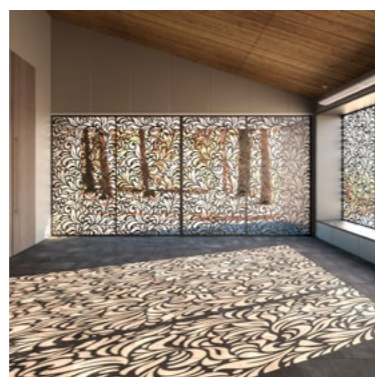
- + Decoration for interior and exterior (interior divider).
- + It is a construction element that lends projects character and distinction.
- + Also can be used for sun control and protection.
- + Durable and functional aluminum system.
- + It shares components with the Thermia MALLORQUINA® shutter system. In other words, it is **manufactured with the same profiles and fittings**.



Applications



Interior design

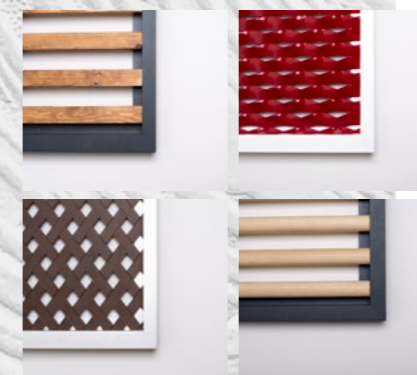


Interior design



Exterior design

Aluminum solution for architectural decorations and sun control.



Thermia® PM40 DECOR can be used to cover the system's leaves using items such as:

- + Square or rectangular tubes of any material (aluminum, wood, stainless steel, PVC, etc.) No greater than 30 cm in width.
- + Expanded metal sheet.
- + Perforated, braided, or free-design sheets.
- + Frameworks.

Quality seals



Qualanod seal for anodization
License number: 1014



Qualicoat seal for lacquer
License number: 405



Qualideco seal for the imitation wood
License number: ES-0009F

Certification



THERMIA BARCELONA
EN14351-1:2006+A2:2016

Design
Comfort
Silence

Manufacture Thermia® windows anywhere in the world.

Our Thermia systems distribution division serves window manufacturers, offering the following advantages to aluminum window companies:

Comprehensive service to manufacturers

- + Optimization of inventory of Thermia® **profiles and accessories.**
- + Specific tools for optimal manufacture of Thermia® **window.**
- + Specialized carpentry software, customized for your use.
- + Start-up and after-sale service.
- + Comprehensive logistics service and tracking of goods.
- + Ongoing training in the manufacture of Thermia® **system.**
- + Corporate communication and marketing support.
- + Ongoing technical and business consulting.



Thermia window manufacturers benefit from optimized inventory management, personalized technical support and business consulting for all Thermia® systems.

“We offer a comprehensive, fully customized service”



The Thermia® systems distribution network

- + Marketing to **domestic manufacturers.**
- + Marketing to **international manufacturers.**

Windows for a better life

Install Thermia® windows



Comprehensive service to installers:

- + Ongoing technical and business consulting.
- + Fast delivery service.
- + Comprehensive logistics service and tracking of goods.
- + Corporate communication and marketing support.

Our personnel, specially trained in manufacturing Thermia® windows, will create whatever closures are requested **under CE regulations.**

In order to guarantee quality, Thermia® closures undergo thorough quality control for:

- Functionality of components.
- The airtightness of the system.
- Surface finishes.

Our manufactured window division allows window installers to purchase Thermia® doors and windows with whatever technical and aesthetic features they need.



Wholesale Thermia® windows manufacturers:

Serving all companies in the construction, architecture, and remodeling industries:

- Factory in Barcelona, Spain
- Factory in Peru
- Factory in Chile
- Factory in Costa Rica
- Factory in El Salvador
- Factory in Colombia
- Factory in Uruguay
- Factory in Dominican Republic
- Factory in Mexico



Design
Comfort
Silence

Windows that measure up to the latest environmental trends: energy efficiency



Less energy use, more comfort.

The maximum thermal insulation of a building is directly related to the resistance capacity of the elements that are in contact with the outside environment: windows doors, exterior walls and roofs. To achieve optimal energy

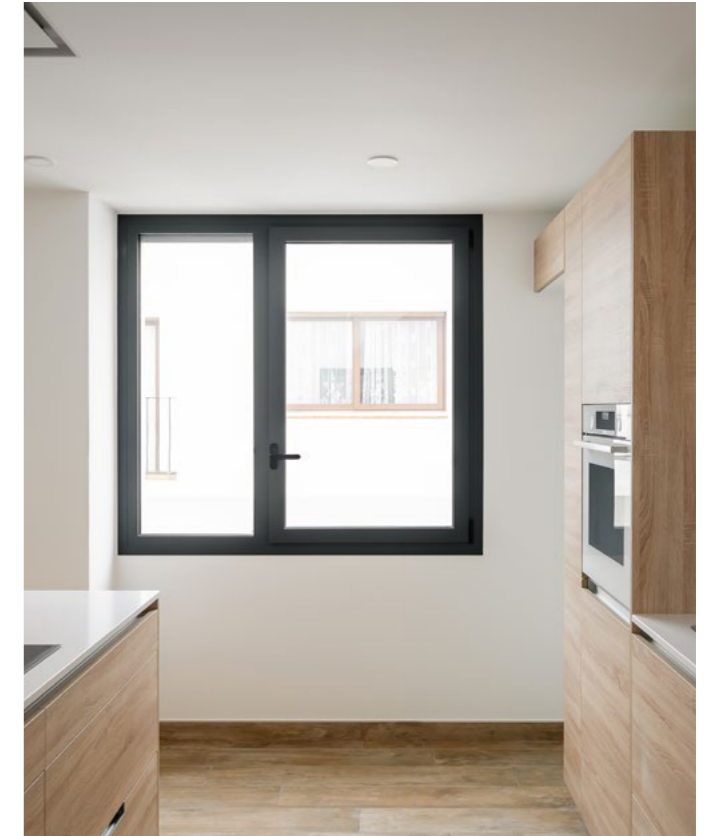
efficiency, suitable insulating materials must be installed on the building envelope. As part of the fight against energy waste and worldwide CO2 emissions, European authorities connected to the

Windows for a better life



A well-insulated house can save up to 50% on energy consumption.

The windows are the most vulnerable part of a residence.



construction industry have established strict and mandatory directives on energy efficiency, which must be applied to buildings and which are found in the Basic Energy Saving Document (DB HE) as an extension to the current Technical Building Code (CTE).

This new legal framework affects both new constructions and existing buildings in the process of being sold or leased.

At Thermia Barcelona® **thermal insulation is one of the highest priority goals** in the design and manufacture of doors and windows. We know that controlling the temperature and humidity inside homes is key to providing the comfort and well-being that we all want.

How noise pollution affects our health and comfort and how insulated windows can help us

Noise pollution is an affliction that affects everyone who lives in major cities. The noise of cars and motorbikes, helicopters and planes remain excessive and annoying sounds that we continue to hear and which affect our health on a daily basis.

In fact, traffic is the main source of noise pollution. A constant sound that hardly ever stops seems to envelop everywhere we go (work, walking around town, the home, etc.)

If you live near to a road with traffic, sleeping or simply the peace of mind of being at home can be a difficult task and often an irritating one.

Being able to rest at home should be routine, but that is not the case for many millions of people.

And then there is sleep. Getting a good night's sleep can become a nightmare if noise penetrates our entire room. And

getting the recommended sleeping hours is vital for our well-being and health.

The WHO (World Health Organization) establishes the maximum levels at 50 dB-60 dB (decibels) and warns that higher exposure can be seriously harmful.

As an example, the noise of a vacuum cleaner is already at 65 dB, a normal conversation is 50 dB and rustling of leaves is 20 dB. It is important to try to lower the decibels in our homes to guarantee a more peaceful house, places to rest and to alleviate tension accumulated during the day. Ultimately, our home is our temple. Shouldn't it be a place of rest and happiness?

Noise-related illnesses include hearing loss, learning problems, strokes, respiratory diseases, stress and irritability or

Windows for a better life



The WHO (World Health Organization) establishes the **maximum levels at 50 dB-60 dB (decibels)** and warns that higher exposure can be seriously harmful to our health.



Psychological health specialists state that peacefully benefiting from sleep time translates to greater effectiveness on a work and emotional level.



neurosis, hysteria and psychosis.

Regardless of the government campaigns to draw up action plans to control and prevent sound contamination in streets and common areas, the fact is that people currently continue to endure pollution damage on a daily basis.

It is not possible to halt the consequences of these pol-

lution indices in public areas in the short term, but we can in our homes.

If we can insulate our home against the constant outside noise, we will be able to improve the quality of our lives, increase our comfort and, above all, ensure that our health is protected.

One of the best options for living with peace and quiet at home is insulated (thermo-acoustic) windows that

protect on the one hand against outside noise, and on the other against the cold and heat depending on the time of year.

Design
Comfort
Silence

Windows for a better life

The importance of glass in acoustic attenuation

Studying the phonic performance of a window, we can find the factors that determine the effectiveness of acoustic attenuation:

Tempered or laminated glass (not acoustic) does not alter the acoustic properties.
However, acoustic laminated glass attenuates more than the same thickness of float glass.

The closures must guarantee the maximum possible air-tightness
Any minor crack in the closure represents an air inlet and, therefore, noise.

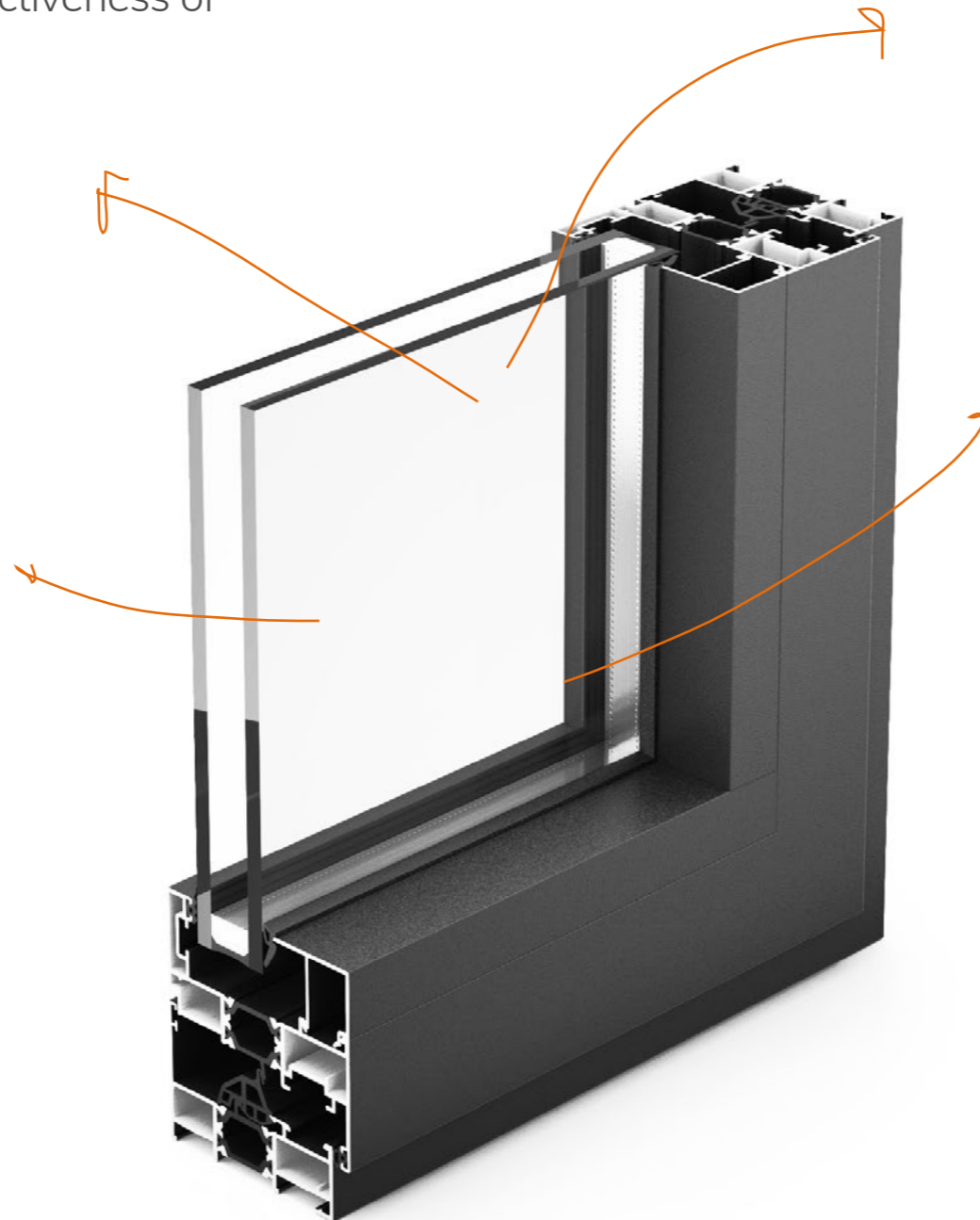
Different thicknesses of chamber glass attenuate more than chamber glass with the same thickness.

The thicker the glass, the greater the attenuation.
It is advisable to fit thicker glass, keeping in mind its weight (2.5 kg per m² and mm of thickness).



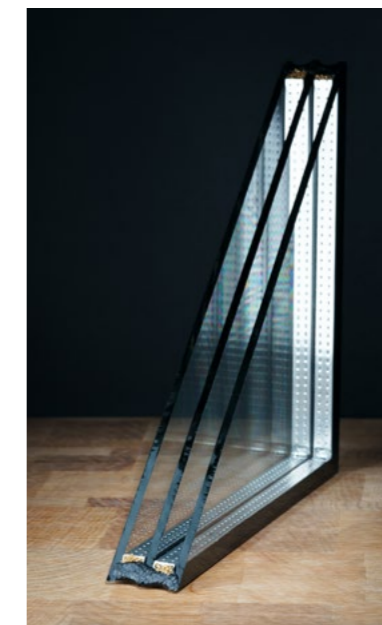
The **solution** at home: **installing airtight windows** that insulate against the outdoors.

Thermia Barcelona® thermo-acoustic windows and screens offer high acoustic and thermal insulation in homes. They feature high airtightness, ideal for combating noise issues, dust and changes in temperature.



Composition		Rw	C	Ctr
Monolithic	3	28	-1	-4
	4	29	-1	-2
	6	31	-1	-2
	10	34	-1	-2
Laminated	33.1	31	0	-1
	44.1	34	0	-1
	66.1	37	0	-2
Acoustic laminated	33SC	33	-1	-2
	44SC	31	-1	-3
	66SC	35	-1	-2
Monolithic	4/12/6	33	-1	-3
	5/12/5	31	-1	-4
	6/12/8	35	-1	-3
Laminated monolithic	5/12/33	36	-1	-5
	5/12/44	36	-1	-4
	10/12/66	39	-1	-3
Acoustic laminated monolithic	6/12/44SC	39	-1	-5
	6/12/66SC	41	-1	-3
Acoustic monolithic acoustic laminated	44SC/12/66SC	45	-1	-5

Glass composition and its acoustic attenuation



ACOUSTIC NOISE TABLE

- 100 dB Ambulance siren.
- 90 dB Noisy road traffic.
- 80 dB Noisy street.
- 70 dB Quiet road traffic.
- 60 dB Restaurant. Store.
- 50 dB Quiet street.
- 40 dB Living room.
- 30 dB Bedroom. Quiet refrigerator.
- 20 dB Quiet rustling of tree leaves.
- 10 dB Quiet breathing.

serie AF52

AF524110 AF524119 AF524113 AF524220 AF524223 AF524225 AF524253 AF524263 AF524270 AF524241 AF524310 AF524320

AF52M125 AF52M085 AF52M010

serie AR52

AR524110 AR524119 AR524278 AR524222 AR524223 AR524225 AR524253 AR524263 AR524270 AR524241 AR524310 AR524320

AR524354 AR524326

serie AF35

AF354110 AF354518 AF354270 AF354210 AF354278 AF354310

serie AR62

AR624110 AR624119 AR624278 AR624222 AR624223 AR624225 AR624253 AR624263 AR624270 AR624241 AR624310 AR624320

AR624354

serie AR78+

AR784115 AR784111 AR784278 AR784155 AR784220 AR784223 AR784253 AR784263 AR784270 AR784241 AR784315 AR784325

AR784165

serie OC78 LUMIA

OC784110 OC784220 OC784222 OC784240 OC784314 OC784315 OC784325 OC784533

serie OC78 LUMIA

OC784110 OC784220 OC784222 OC784240 OC784314 OC784315 OC784325 OC784533

serie A000

A0004519 A0004512 A0004515 A0004517 A0004521 A0004527 A0004531 A0004539 A0004532

A0004500 A0004509 A0004511 A0004516 A0004518

serie A000

A0004500 A0004509 A0004511 A0004516 A0004518

serie A000

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serie A000

A0004500 A0004509 A0004511 A0004516 A0004518

Leyenda □ STOCK BLANCO ■ STOCK PLATA ■ STOCK CURVA □ APTO CURVA □ STOCK DISPONIBLE BICOLOR * BRUTO BAJO PEDIDO ** BRUTO BAJO PEDIDO CON MÍNIMO (consultar número de barras).

serie CF26

CF264111 CF264120 CF264130 CF264200 CF264210 CF264212 CF264250

serie CF31

CF314110 CF314121 CF314130 CF314201 CF314205 CF314210 CF314212 CF314251 CF314252

serie CR31

CR314110 CR314121 CR314130 CR314203 CR314204 CR314210 CR314211 CR314958 CR314962

serie CF40

CF404110 CF404130 CF404244 CF404242 CF404243 CF404246 CF404247 CF404250 CF404251 CF404254

serie CR40

CR404110 CR404105 CR404106 CR404107 CR404242 CR404244 CR404246 CR404247 CR404248 CR404249

serie CR46 MAGNA

CR464110 CR464105 CR464130 CR464107 CR464203 CR464205 CR464206 CR464210 CR464212 CR464222 CR464254 CR464251 CR464202

serie ER52

ER524110 ER524130 ER524100 ER524103 ER524120 ER524200 ER524201 ER524220 ER524240 ER524500 ER524140 ER524150 ER524141 ER524250

serie CF22

CF224110 CF224202 AF354110 CF224212 CF224250

serie CF40

CF404110 CF404130 CF404244 CF404242 CF404243 CF404246 CF404247 CF404250 CF404251 CF404254

serie CR40

CR404110 CR404105 CR404106 CR404107 CR404242 CR404244 CR404246 CR404247 CR404248 CR404249

serie CR46 MAGNA

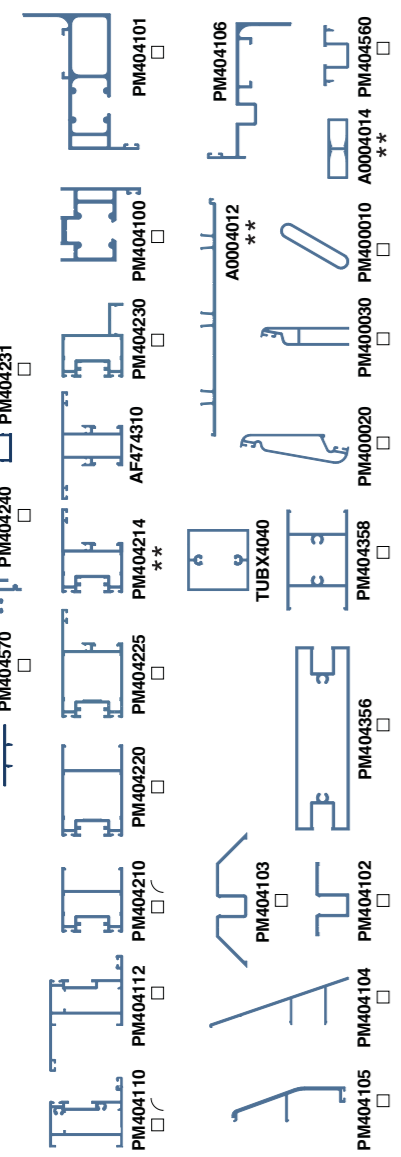
CR464110 CR464105 CR464130 CR464107 CR464203 CR464205 CR464206 CR464210 CR464212 CR464222 CR464254 CR464251 CR464202

serie ER52

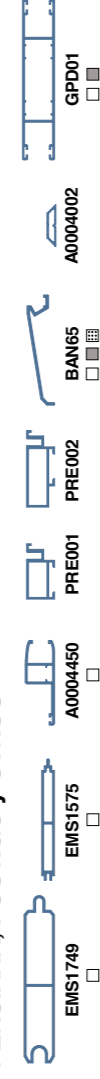
ER524110 ER524130 ER524100 ER524103 ER524120 ER524200 ER524201 ER524220 ER524240 ER524500 ER524140 ER524150 ER524141 ER524250

Leyenda □ STOCK BLANCO ■ STOCK PLATA ■ STOCK CURVA □ APTO CURVA □ STOCK DISPONIBLE BICOLOR * BRUTO BAJO PEDIDO ** BRUTO BAJO PEDIDO CON MÍNIMO (consultar número de barras).

MALLORQUINA



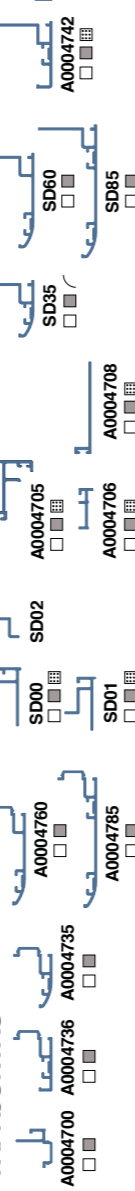
PERSIANA, POSTIGO Y OTROS



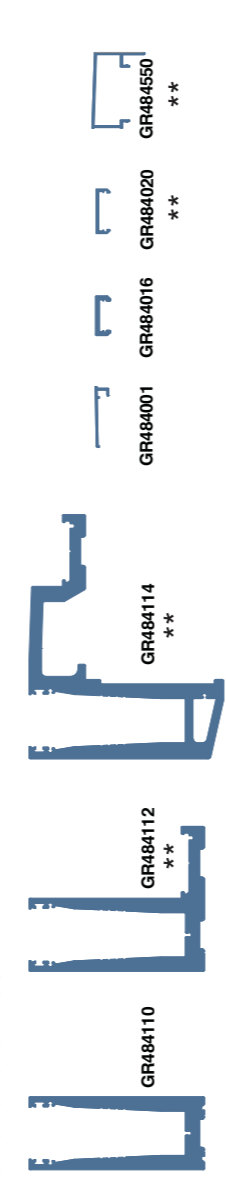
barandilla TRADICIONAL



TAPAJUNTAS



barandilla GLASS RAIL



Leyenda

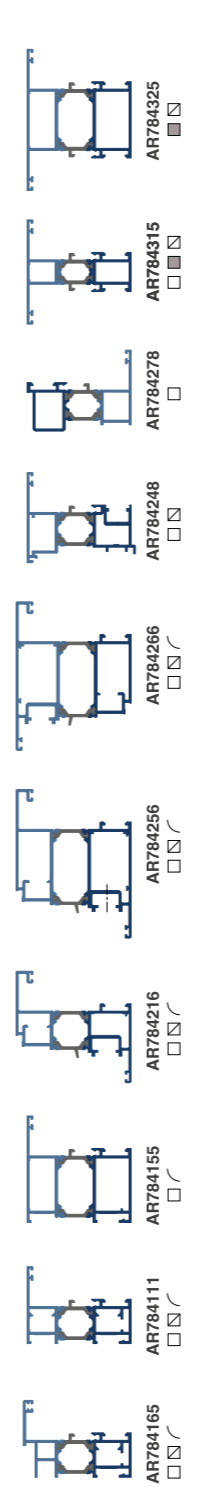
□ STOCK BLANCO ■ STOCK PLATA ▨ STOCK 7016 TX / APTO CURVA □ STOCK DISPONIBLE BICOLOR * BRUTO BAJO PEDIDO * BRUTO BAJO PEDIDO

** BRUTO BAJO PEDIDO CON MÍNIMO

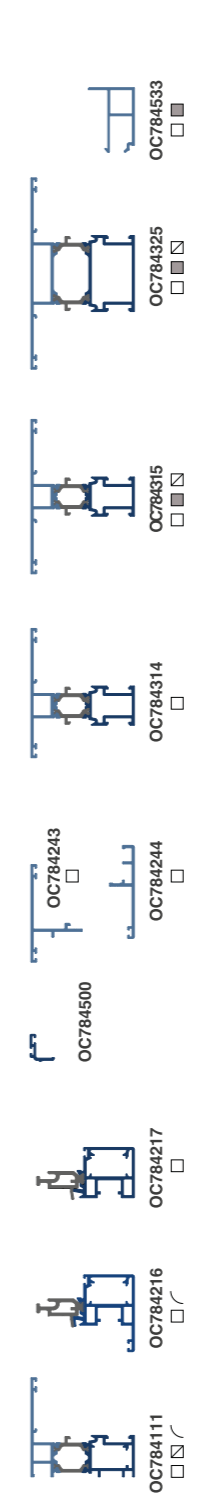
(consultar número de barras).

THERMIA BARCELONA.COM

serie AR78+ C16



serie OC78+ C16



junquillos



Leyenda

□ STOCK BLANCO ■ STOCK PLATA / APTO CURVA □ STOCK DISPONIBLE BICOLOR * BRUTO BAJO PEDIDO * BRUTO BAJO PEDIDO

(consultar número de barras).

** BRUTO BAJO PEDIDO CON MÍNIMO

THERMIA BARCELONA.COM

Design
Comfort
Silence

Technical charts for Thermia® systems



Thermia® sliding series

Series	RPT Series	mm Frame / leaf POLYAMIDE	Uf	Uw WINDOW* up to	mm MAIN FRAME	mm MAIN LEAF	mm PROFILE THICKNESS	mm MAXIMUM GLASS
Thermia® ER52	Yes	24/14	4.385	1.84*	125	52	1.8	30
Thermia® CR46 MAGNA	Yes	24/25	3.162	1.65**	65	46	1.6 / 1.8	34
Thermia® CR40 VERSIA	Yes	24	3.3	1.60*	65	40	1.4 / 1.6	28
Thermia® CF40 VERSIA	No	No	-	-	65	40	1.4 / 1.6	28
Thermia® CR31	Yes	14/25	4.1	1.80*	75	31	1.5	24
Thermia® CF31	No	No	-	-	75	31	1.5	11 / 21
Thermia® CF26	No	No	-	-	65	26	1.3	11 / 17
Thermia® CF22	No	No	-	-	35	22	1.2	8 / 15

*Uw: DB HE 1.6 x 2.1 balcony door glass Ug = 1.1 W/m2K Thermal transmittance coefficient of the profiles (Uf= chart value), EN, 10077-2

**UW: DB HE 2.8 x 2.25 balcony door glass Ug = 1.0 W/m2K Thermal transmittance coefficient of the profiles (Uf= chart value), EN, 10077-2

SERIES	MAXIMUM GLASS WEIGHT (kg)	3 TRACK OPTION	4 OR MORE TRACKS	THICKNESS PROFILES	COLORS IN STOCK
Thermia® ER52	350	Yes	No	Window / Balcony Door	Raw / Silver / White
Thermia® CR46 MAGNA	300	Yes	Yes	Window / Balcony Door	Raw / Silver / White
Thermia® CR40 VERSIA	160 / 200	Yes	Yes	Window / Balcony Door	Raw / Silver / White
Thermia® CF40 VERSIA	160 / 200	Yes	Yes	Window / Balcony Door	Raw / Silver / White
Thermia® CR31	160	Yes	Yes	Window / Balcony Door	Raw / Silver / White
Thermia® CF31	160	Yes	Yes	Window / Balcony Door	Raw / Silver / White
Thermia® CF26	120	Yes	Yes	Window / Balcony Door	Raw / Silver / White
Thermia® CF22	80	No	No	Window	Raw / White

Windows for a better life

Technical charts for Thermia® systems



Thermia® casement series

SERIES	RPT Series	mm POLYAMIDE Frame / leaf	Uf	Uw WINDOW* up to	mm MAIN FRAME	mm MAIN LEAF	mm PROFILE THICKNESS
Thermia® AR78+ CE	Yes	24	2.50	1.07**	70	78	1.5-1.8
Thermia® OC78 LUMIA	YES	24	2.65	1.29*	70	78	1.5 - 1.8
Thermia® AR62 CE	Yes	24	2.58	1.46*	55	62	1.5-1.8
Thermia® AR5 CE	Yes	14	3.139	1.56*	45	52	1.5-1.8
Thermia® AF52 CE	No	No	-	-	45	52	1.5-1.8
Thermia® AF35	No	No	-	-	35	35	1.2

*Uw: DB HE 1.6 x 2.1 balcony door glass Ug = 1.1 W/m2K Thermal transmittance coefficient of the profiles (Uf= chart value), EN, 10077-2

**Glass Ug=0.7 W/m2K

*+ 20 Kg door hinges

SERIES	MAXIMUM GLASS (mm)	MAXIMUM GLASS WEIGHT WITH CASEMENT FOLDABLE SYSTEM (kg)	MAXIMUM GLASS WEIGHT WITH TILT AND TURN SYSTEM (kg)	THICKNESS PROFILES	COLORS IN STOCK
Thermia® AR78+ CE	49	90	160	Window / Door	Raw / Silver / White
Thermia® OC78 LUMIA	31	90	160	Window	Raw / Silver / White
Thermia® AR62 CE	37	90	160	Window / Door	Raw / Silver / White
Thermia® AR52 CE	27	90	160	Window / Door	Raw / Silver
Thermia® AF52 CE	27	90	160	Window / Door	Raw / Silver / White
Thermia® AF35	8 / 21	90	160	Window	Raw / Silver

SERIES	RPT Series	mm POLYAMIDE Frame / leaf	Uf	Uw WINDOW* up to	mm MAIN FRAME	mm MAIN LEAF	mm PROFILE THICKNESS
Thermia® AR78+ C16	Yes	24	2.9	1.17***	70	78	1.5-1.8
Thermia® OC78+ C16	Yes	24	2.68	1.47*	70	66	1.5

SERIES	MAXIMUM GLASS (mm)	MAXIMUM GLASS WEIGHT WITH CASEMENT FOLDABLE SYSTEM (kg)	MAXIMUM GLASS WEIGHT WITH TILT AND TURN SYSTEM (kg)	THICKNESS PROFILES	COLORS IN STOCK
Thermia® AR78+ C16	49	90 / 130 (door)	100	Window / Door	Raw / Silver / White
Thermia® OC78+ C16	28	90	100	Window	Raw / Silver / White

*Uw: DB HE1 1.6 x 2.1 balcony door glass Ug = 1.1 W/m2K, Thermal transmittance coefficient of the profiles Uf=2.68 W/m2K

***UW: DB HE1 1.6 x 2.2 balcony door glass Ug = 0.7 W/m2K, Thermal transmittance coefficient of the profiles with Politech NA33 Uf=2.94 W/m2K

Design
Comfort
Silence

Acoustic properties of glazed windows

Simplified calculation according to standard EN-UNE 14351-1:2006
Valid according to the Technical Building Code Catalog of Construction Components

Annotations:

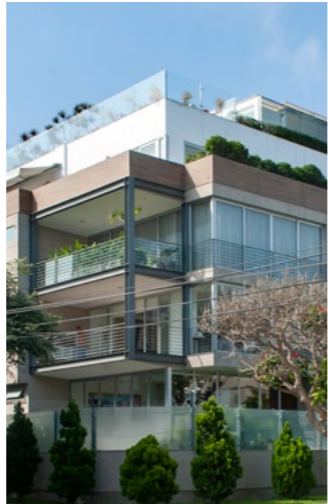
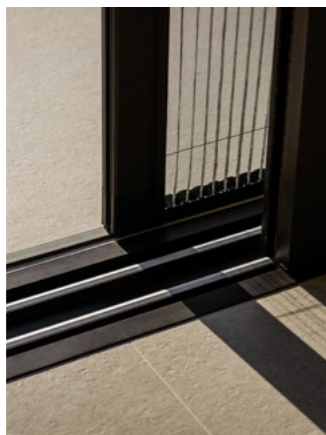
- C Spectral adaptation term of the sound reduction index for incident pink noise, in dB.
- C_{tr} Spectral adaptation term of the sound reduction index for automobile noise, in dB.
- R_A Global sound reduction index, A weighted, in dBA.
- R_{A,tr} Global sound reduction index, A weighted, for automobile noise, in dBA.
- R_w Global sound reduction index, in dB.

ACOUSTIC INSULATION VALUES FOR WINDOWS with a surface area of up to 2.7 m ²											
Composition		THERMIA® Series									
		CF31 / CF40 / CR31 / CR40 / CR46M / ER52					AF52 / AR52 / AR62 / AR78+ / OC78+				
Type	Thickness (mm)	R _w (dB)	C (dB)	C _{tr} (dB)	R _A (dBA)	R _{A,tr} (dBA)	R _w (dB)	C (dB)	C _{tr} (dB)	R _A (dBA)	R _{A,tr} (dBA)
Plain glass	6	28	-1	-1	27	27	31	-2	-3	29	28
	8	29	-1	-2	28	27	32	-2	-3	30	29
	10	29	-1	-2	28	27	33	-2	-3	31	30
	12	29	-1	-1	28	28	34	0	-2	34	32
Laminated glass (0.36 butyral)	3+3										
	4+4										
	6+6	29	-1	-2	28	27	32	-1	-3	31	29
	8+8	29	-1	-2	28	27	33	-1	-3	32	30
	10+10	29	-1	-2	28	27	34	-1	-3	33	31
Insulated glass units (air chamber measuring 6 mm to 20 mm)	4/(6..20)/4	27	-1	-2	26	25	32	-1	-5	31	27
	4/(6..20)/6	29	-1	-2	28	27	34	-1	-4	33	30
	4/(6..20)/8	29	-1	-2	28	27	34	-1	-4	33	30
	4/(6..20)/10	29	-1	-2	28	27	35	-1	-4	34	31
	6/(6..20)/6	28	-1	-2	27	26	33	-1	-4	32	29
	6/(6..20)/8	29	-1	-2	28	27	35	-1	-5	34	30
	6/(6..20)/10	29	-1	-1	28	28	35	-1	-3	34	32
Insulated glass with laminated panels	6/(6..20)/6+6	29	-1	-2	28	27	34	-1	-4	33	30
	6/(6..20)/10+10	-	-	-	-	-	36	-1	-4	35	32

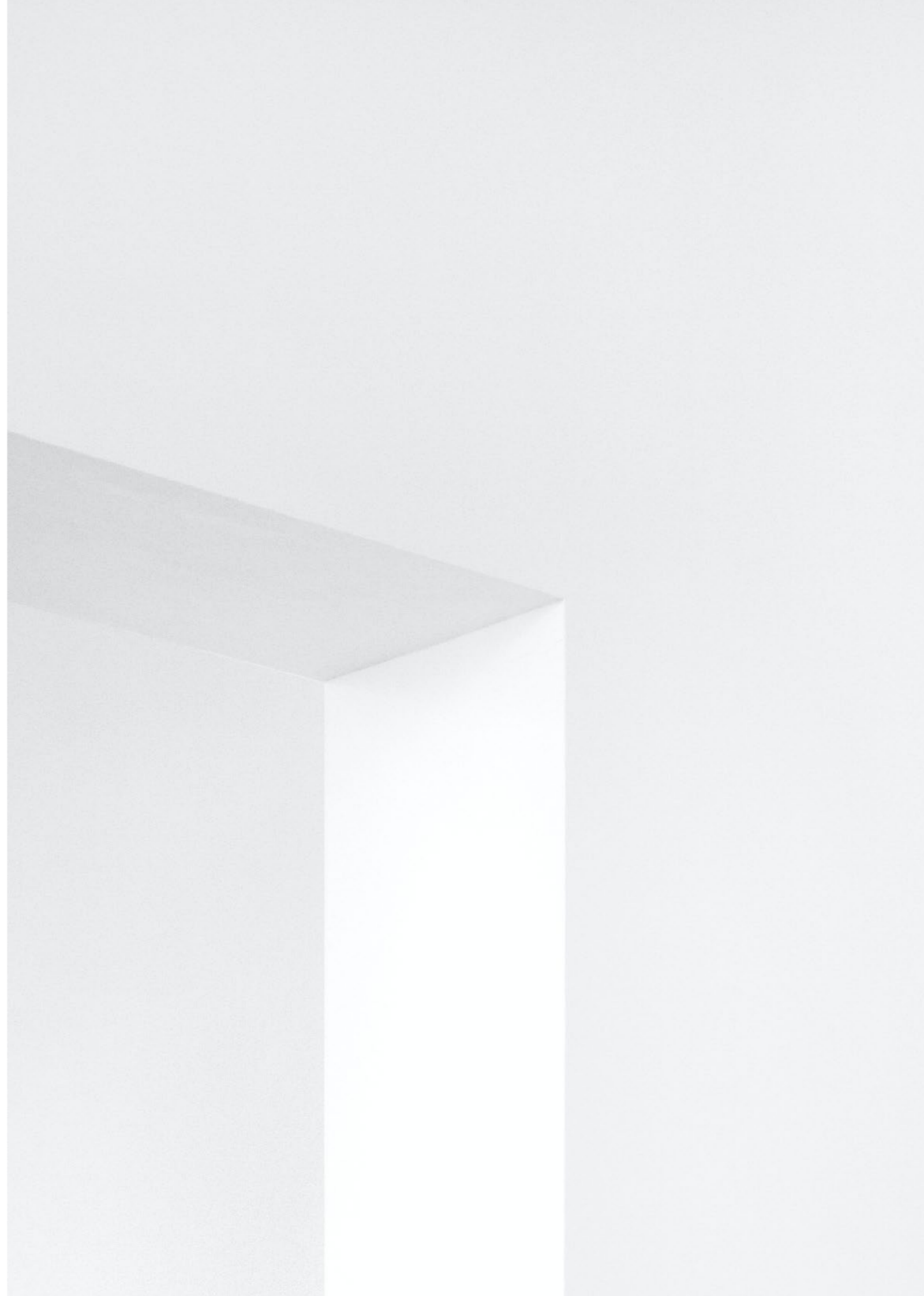
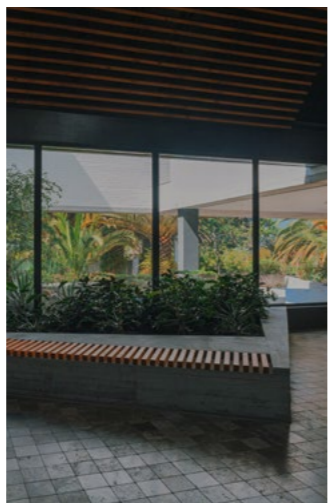
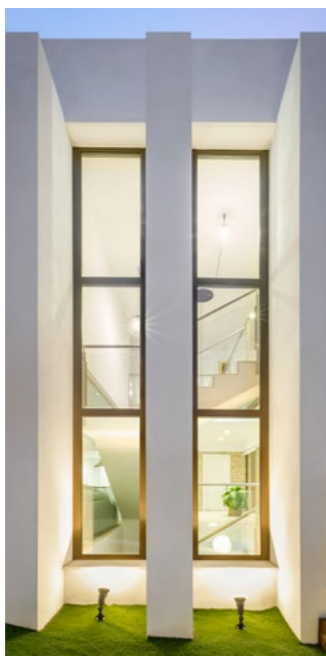
Correction by side:	Total surface area of the windows	Correction factor to be applied to R _A and R _{A,tr}
	2.7 m ² < A ≤ 3.6 m ²	-1 dB
	3.6 m ² < A ≤ 4.6 m ²	-2 dB
	4.6 m ² < A	-3 dB

International Distribution

- | | | | |
|----------------------|---------------|---------------|-------------|
| Latin America | Europe | Africa | Asia |
| · Peru | · Spain | · Algeria | · India |
| · Ecuador | · France | · Ghana | |
| · Chile | | | |
| · Colombia | | | |
| · El Salvador | | | |
| · Panama | | | |
| · Costa Rica | | | |
| · Dominican Republic | | | |
| · Mexico | | | |



We are proud that our windows have played a part in improving the comfort and quality of life in all these homes.



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