



Windows for a **better life** 





































"For us, **a window** is more than just a structure placed into a a wall. For us, **a window is** nothing less than an opportunity to live a better life."

Thermia Barcelona Windows for 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

Charles Baudelaire.

luminous square life lives, life dreams, life suffers."

Design Comfort Silence

#### THE THERMIABARCELONA.COM

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

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





# 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.





One of our goals at Thermia Barcelona is to ensure that you as a client can work with our product with full confidence in the quality, design and comfort that the market demands; you need to feel that you partnered with a responsible, professional team that will guide you and support you at all times.

#### What does a window represent for Thermia Barcelona?

"We think of a window as something more than a structure placed into a wall.

For us, a window must go further; it must create spaces where there were none before: it must allow our home to be bathed in natural light; it must be airtight to protect us from cold and heat; it must provide us with a silent environment; have a design that harmonizes with the rest of the architecture, and it must facilitate energy savings. A window should help create a more comfortable and functional home, with minimal effort on the part of the user.

For Thermia®, a window is nothing less than an oppor-

tunity 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

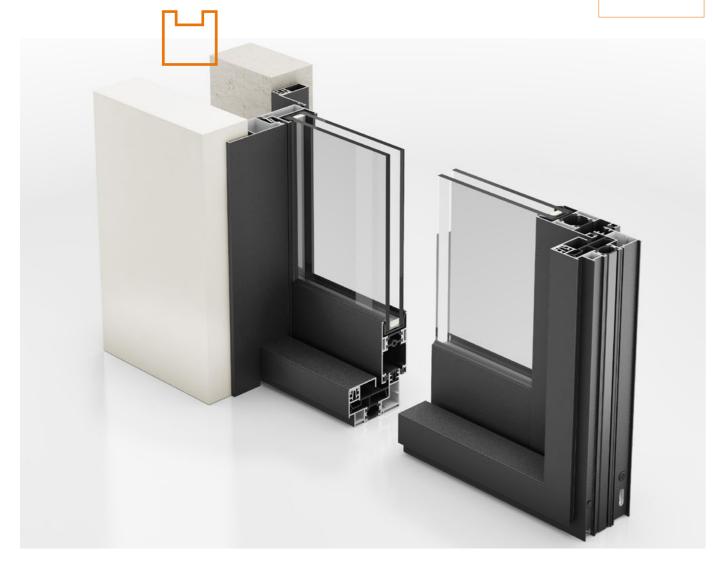
window fulfills the mission we have entrusted to it.

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, leading-edge, technicallyminded, involved. transparent, curious, empathic, optimistic, sensitive. That is the approach that we take here at Thermia Barcelona



Design Comfort Silence



# 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.





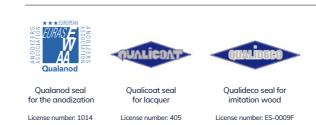


All Thermia® windows are manufactured by specially-trained professionals to ensure that every component of the window will work properly.

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 quality seal for lacquer, QUALIDECO for imitation wood lacquer, and QUALANOD for anodization.

#### **QUALITY SEALS**









CERTIFICATION

All Thermia Barcelona® Systems are tested in laboratories approved to conduct air permeability, water tightness and wind resistance tests.

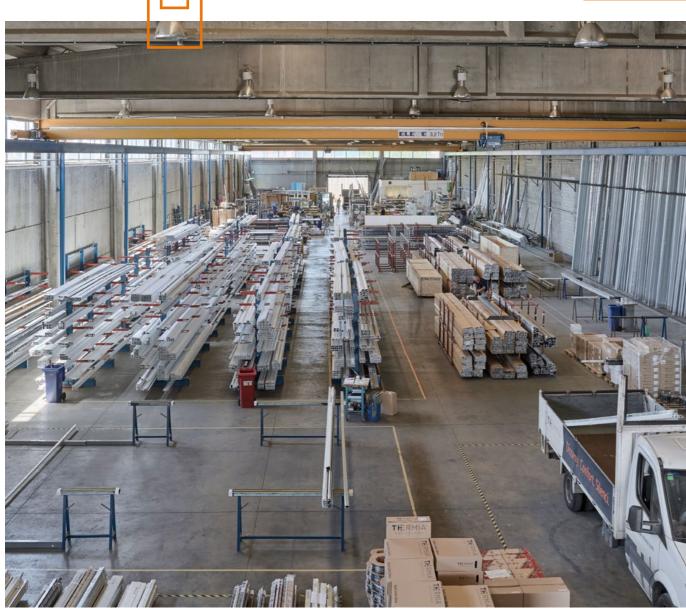
## In-house **Technical** Department



All Thermia® European window systems are developed in-house.

- 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.





# Facilities. Where Thermia® windows are designed.

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 7000m<sup>2</sup> of space to serve our clients.

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

Most visits to our showroom in Barcelona end in a sale.



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.



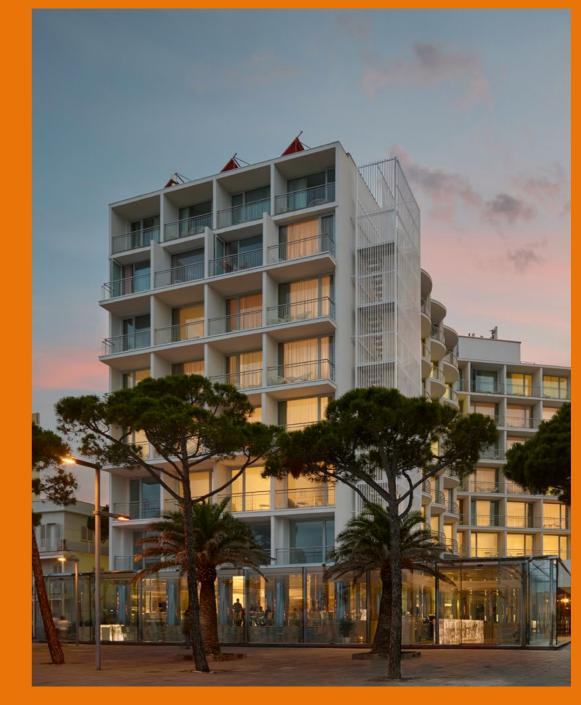












**Hotel Aromar** 



#### Casa RDP

Location: Quito. Ecuador.

Winner of the Quito Architecture Biennial BAQ2016

Finalist in the Latin American Architecture Biennial 2017

Architects: Daniel Moreno Flores / Sebastián Calero









Casa RDP



Design Comfort **Silence** 



Hotels.

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











#### **Wyndham Hotel Quito International Airport**

Location: Mariscal Sucre Airport - Quito, Ecuador. Architect: Grupo Pronobis.





20 Thermia Barcelona

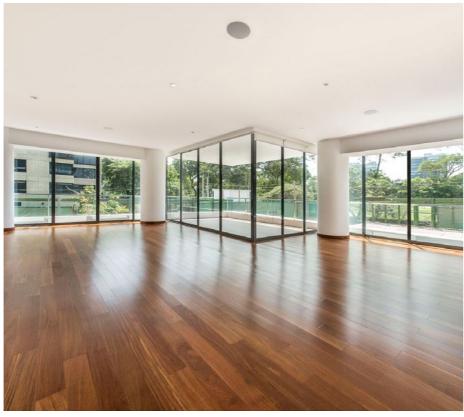
Windows for a better life Works





Klimt Building

Thermia® windows in Spain, France, Algeria, Peru, Colombia, Ecuador, Chile, Uruguay, El Salvador, Panamá, Dominican Republic, India.



Klimt Building





Klimt Building
Location: Miraflores District - Lima, Peru
Architect: Bernardo Fort Brescia.

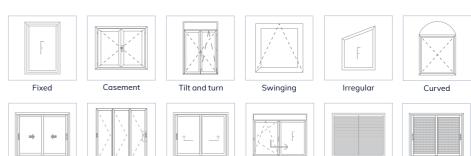




# A Thermia® window for everyone

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®

#### 24 Thermia Barcelona

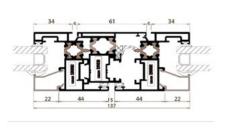
# **Technical solutions.** Windows for all types of projects.

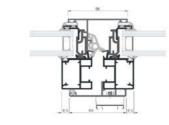


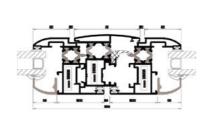
Design

Comfort **Silence** 

#### **Esthetic solutions**





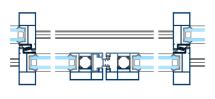


Straight lines.

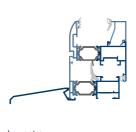
Hidden leaf.

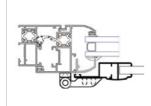
Curved lines









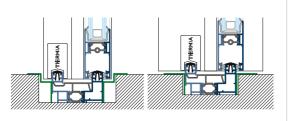


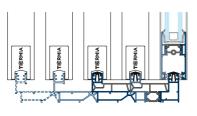
Handle reinforcement sliding window leaf.

Internal shutter.

Multi-track frame







90° corner.

Recessed lower frame.





Single track and fixed. The ideal combination for hotels.

'Kiss 90°' (front view)

'Kiss 90°' (inside view)

'Pocket'

THE THERMIABARCELONA.COM

# Accessories. Getting the details right.





ISEO MASTER



#### **Bearings**

Height-adjustable, nylon 6/6 + 30% fiberglass, turned and with single or double ball or needle wheels, depending on the weight borne (40, 80, 160, 200 kg.) F212 stainless steel cap and wheels, and anticorrosive coating.

#### **Folding handles**

Manufactured under the ISO 9001 seal. Tested for 25,000 cycles with cast aluminum and AISO 430F stainless steel.

#### Sliding window multi-point closure

Manufactured under the ISO 9001 seal. Tested for 25,000 cycles.

#### CE tilt and turn

Manufactured under the ISO 9001 seal. Tested for 25,000 cycles up to 130 kg. Per leaf. Made of high-density zamac with an anti-corrosion treatment and AISI 430F stainless steel.

Height and width adjustable +/- 1mm.

#### **CE Projecting stay hinges**

Manufactured under the ISO 9001 seal. Made of AISI 430 stainless steel. Tested for 25,000 cycles.

#### **CE** hinges

Manufactured under the ISO 9001 seal. Tested for 200,000 cycles. Capable of bearing loads of up to 70 kg. (2 hinges) and 90 kg. (3 hinges). Made of extruded aluminum and AISI 430F stainless steel.

#### **CE door hinges**

Manufactured under the ISO 9001 seal. Tested for 200,000 cycles. Capable of bearing loads of up to 90 kg. (2 hinges) and 110 kg. (3 hinges). Made of extruded aluminum and stainless steel.

#### Sealing and glazing gaskets

All made of top-quality EPDM rubber to maintain their properties over time and without deterioration caused by heat and cold, providing windows with a hermetic seal for years.

#### Weatherstripping

Manufactured with double or triple stitching. Provided with an integrated water-repellent textile film that acts as a barrier against the passage of air, water, and noise, allowing the panes to slide silently.

#### **Corner joints**

Made of cast aluminum and held with stainless steel screws, assuring protection against rust at the joints, where there the window is most exposed to water.

#### Surface treatments

Based on testing in neutral salt-spray chamber as per standard EN 1670: 2007 with classes 4 and 5.

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.







# **Windows**with a style of their own.

At Thermia Barcelona®, we understand the importance of design in the architectural world, and that's 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.





#### **Quality seals**



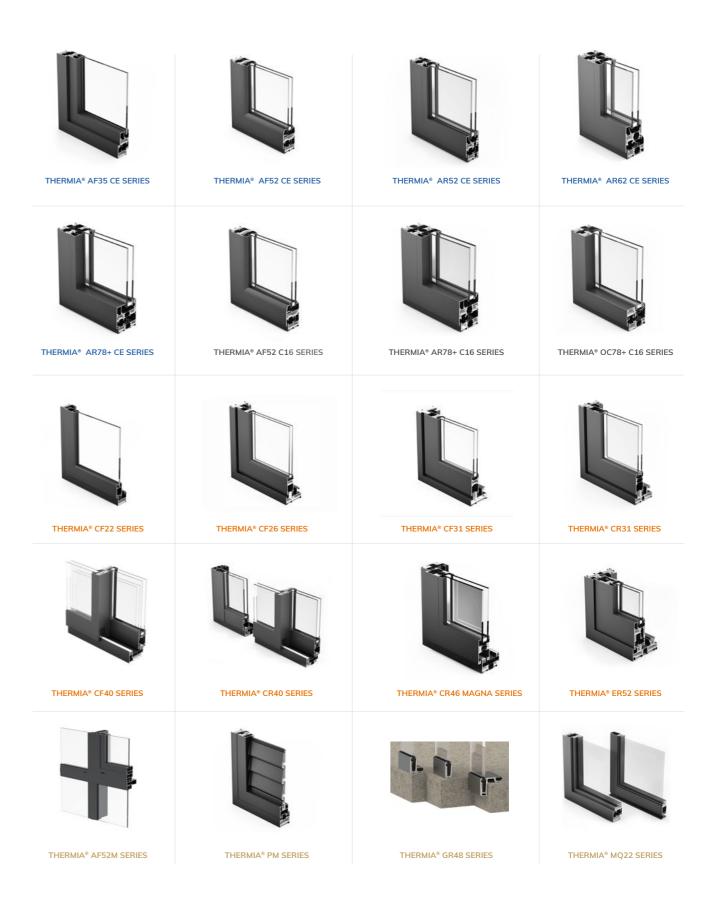
Stantard price	I	Glass	Matte	Texture
RAL 1013 color cream		<b>✓</b>	×	<b>~</b>
RAL 1015 color cream		<b>~</b>	<b>~</b>	<b>~</b>
RAL 3005 color red		<b>~</b>	<b>~</b>	×
RAL 5010 color blue		<b>~</b>	×	<b>~</b>
RAL 5014 color blue		×	×	<b>~</b>
RAL 6005 color green		<b>~</b>	<b>~</b>	<b>~</b>
RAL 6009 color green		<b>~</b>	<b>~</b>	<b>~</b>
RAL 6021 color green		×	×	<b>~</b>
RAL GRAFIT color gray		×	<b>~</b>	×
RAL 7012 color gray		<b>~</b>	<b>~</b>	<b>✓</b>
RAL 7015 color gray		×	×	<b>~</b>
RAL 7016 color gray		<b>~</b>	<b>~</b>	<b>~</b>
RAL 7022 color gray		<b>~</b>	<b>~</b>	<b>~</b>
RAL 7024 color gray		<b>~</b>	×	<b>~</b>
RAL 7031 color gray		×	×	<b>~</b>
RAL 7035 color gray		<b>~</b>	<b>~</b>	<b>~</b>
RAL 8014 color brown		<b>~</b>	<b>~</b>	<b>~</b>
RAL 8017 color brown		<b>~</b>	<b>~</b>	<b>~</b>
RAL 8019 color brown		<b>~</b>	<b>~</b>	<b>~</b>
RAL 9010 color white		<b>~</b>	<b>~</b>	<b>~</b>
RAL 9011 color black		<b>✓</b>	<b>~</b>	<b>~</b>
RAL 9016 color white		X	<b>~</b>	<b>~</b>

Special price		Glass	Matte	Texture	
Cobre óxido		×	×	<b>✓</b>	
Noir 100 sable		×	X	<b>~</b>	
Noir 200		×	X	<b>~</b>	
Brun 650 sable		X	X	<b>~</b>	
Blue 600		X	X	<b>~</b>	
Gray 150 sable		X	X	<b>~</b>	
Wood price			Glass	Texture	
Pino envejecido			×	<b>/</b>	
Sapelli caoba			<b>✓</b>	<b>~</b>	
Roble golden			X	<b>~</b>	
Pino nudo			<b>✓</b>	<b>~</b>	
Castaño oscuro			<b>~</b>	<b>~</b>	
Embero dorado			X	<b>~</b>	
Nogal oscuro	是		X	<b>~</b>	
Roble irlandés			X	<b>~</b>	
Fresno			X	<b>~</b>	
Wenge			<b>✓</b>	<b>~</b>	
Nogal andaluz			<b>✓</b>	<b>~</b>	
Cerezo claro			<b>/</b>	<b>~</b>	
Teka			<b>✓</b>	✓ pə	
Anodized price			Matte	Polished	
Bronze			<b>✓</b>	<b>~</b>	
Stainless steel			<b>/</b>	<b>~</b>	
Silver			<b>✓</b>	~	



# Thermia Barcelona® series

Systems for aluminium windows



# Thermia® AF35 CE

**Basic Casement Series** 

Technical features <b>Thermia® AF35 CE</b>		
No		
35 mm		
35 mm		
1.2 mm		
8 / 21 mm		
90 Kg		
130 Kg		
Window		



Our product series



Projecting Casement Tilt and turn Fixed structure



Acoustic attenuation up to 34 dB (Window size: 1230cm x 1450cm with acoustic laminated glass.) .

# Thermia® AF35 CE test results Cross-section of Thermia® AF35 CE series Watertightness Wind resistance Results of official tests performed on Applus and on the basis of Annex E of standard EN-14351-1:2006

#### Certification



Quality seals

for the anodization License number: 1014

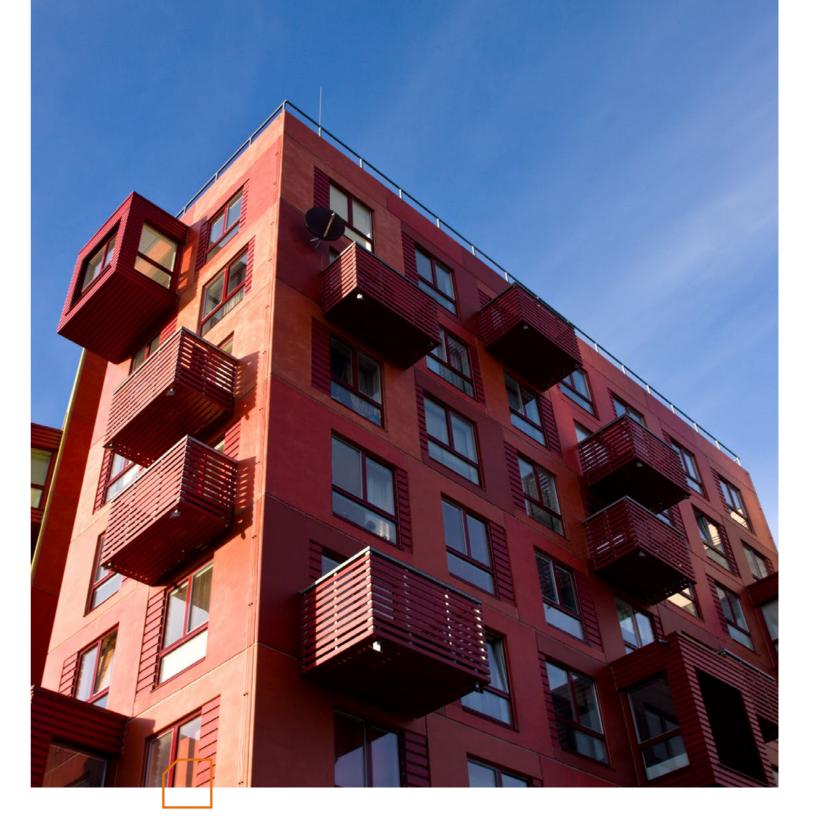




Qualideco seal for the License number: ES-0009F



EN14351-1:2006+A2:2016



# The basic, effective window

# Thermia® AF52 CE

Standard Casement Series

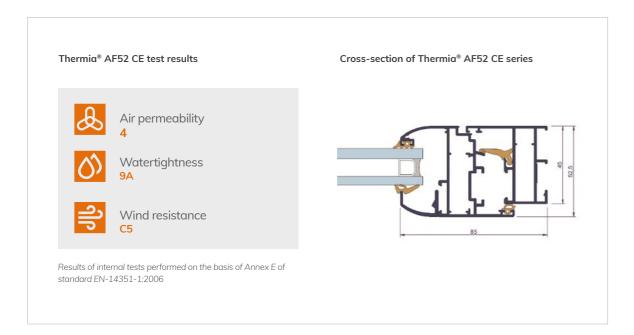
Technical features <b>Thermia® AF52 CE</b>			
Thermal break	No		
Main frame	45 mm		
Main sash	52 mm		
Profile thickness	1.5 / 1.8 mm		
Maximum glass thikness	27 mm		
Maximum glass weight	90 Kg		
Tilt and turn leaf maximum weight	130 Kg		
16 mm channel	Yes		
Available profiles	Window / Door		



Our **product series** 



Acoustic attenuation up to 39 dB (Window size: 1230cm x 1450cm with acoustic laminated glass.)



#### Quality seals



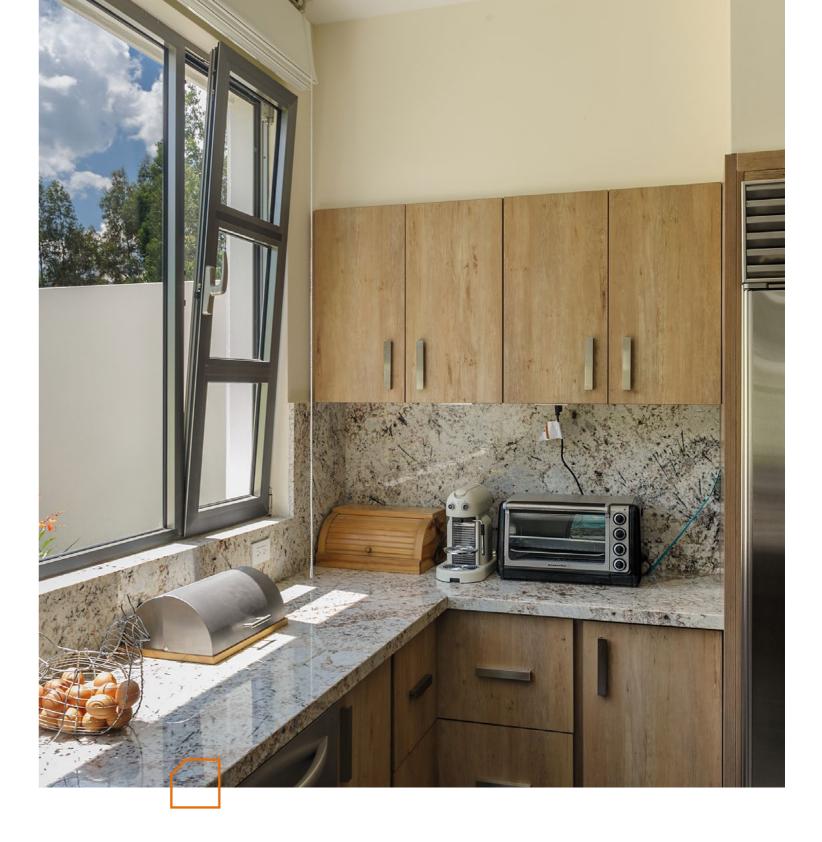
License number: 1014







Certification



# The silence that you have been looking for

## Thermia® AR52 CE

Standard RPT Casement Series

Technical features <b>Thermia® AR52 CE</b>		
Thermal break	Yes / 14 mm	
Main frame	45 mm	
Main sash	52 mm	
Profile thickness	1.5 / 1.8 mm	
Maximum glass thikness	27 mm	
Maximum glass weight	90 Kg	
Tilt and turn leaf maximum weight	130 Kg	
Available profiles	Window / Door	

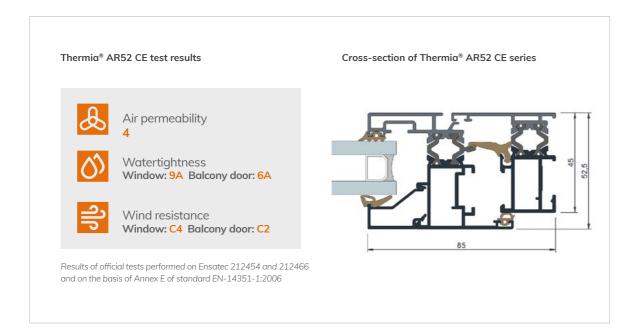
Uw window = **1.56 W/mk**<sup>2\*</sup>



Our product series



Acoustic attenuation up to 40 dB (Window size: 1230cm x 1450cm with acoustic laminated glass.)



#### Quality seals



License number: 1014



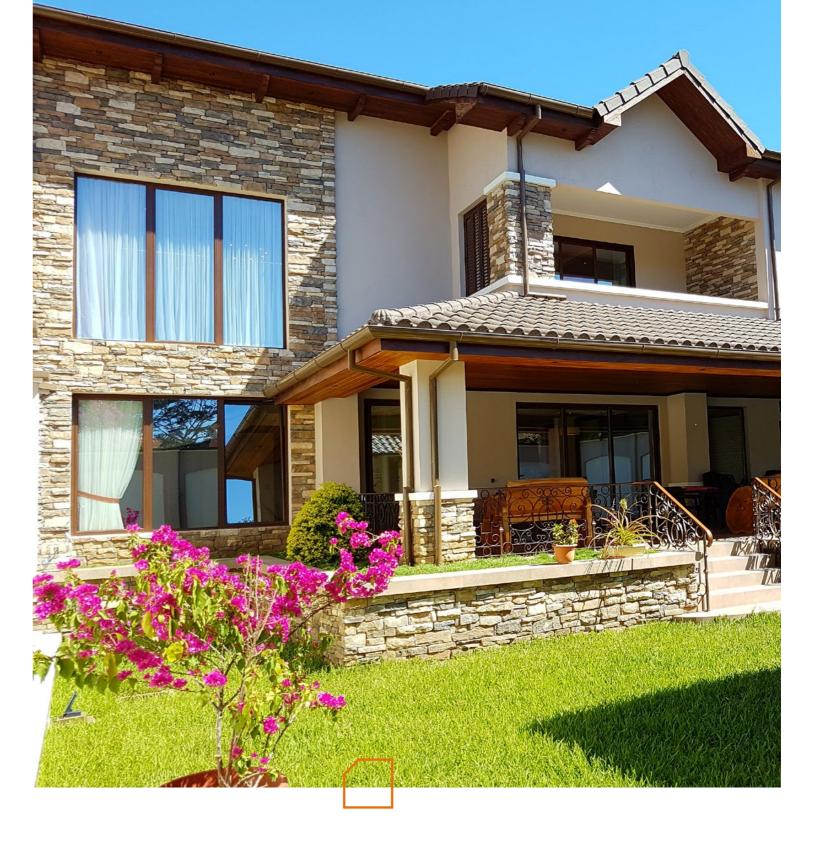


License number: ES-0009F

#### Certification



THERMIA BARCELONA EN14351-1:2006+A2:2016



# Thermal insulation and acoustic isolation for everyone

<sup>\*</sup> Based on EN 10077-02 Single-leaf 1.5x2.4 balcony door glass Ug=  $1.1 \psi$ = 0.053

# Thermia® AR62 CE

Top RPT Casement Series

Technical features Thermia® AR62 CE		
Thermal break	Yes / 24 mm	
Main frame	55 mm	
Main sash	62 mm	
Profile thickness	1.5 / 1.8 mm	
Maximum glass thikness	37 mm	
Maximum glass weight	90 Kg	
Tilt and turn leaf maximum weight	130 Kg	
Available profiles	Window / Door	

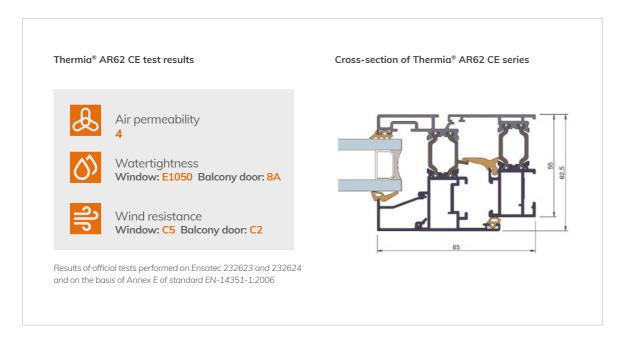
Uw window = **1.46 W/mk<sup>2\*</sup>** 



Our product series



Acoustic attenuation up to 42 dB (Window size: 1230cm x 1450cm with acoustic laminated glass.)



#### Quality seals







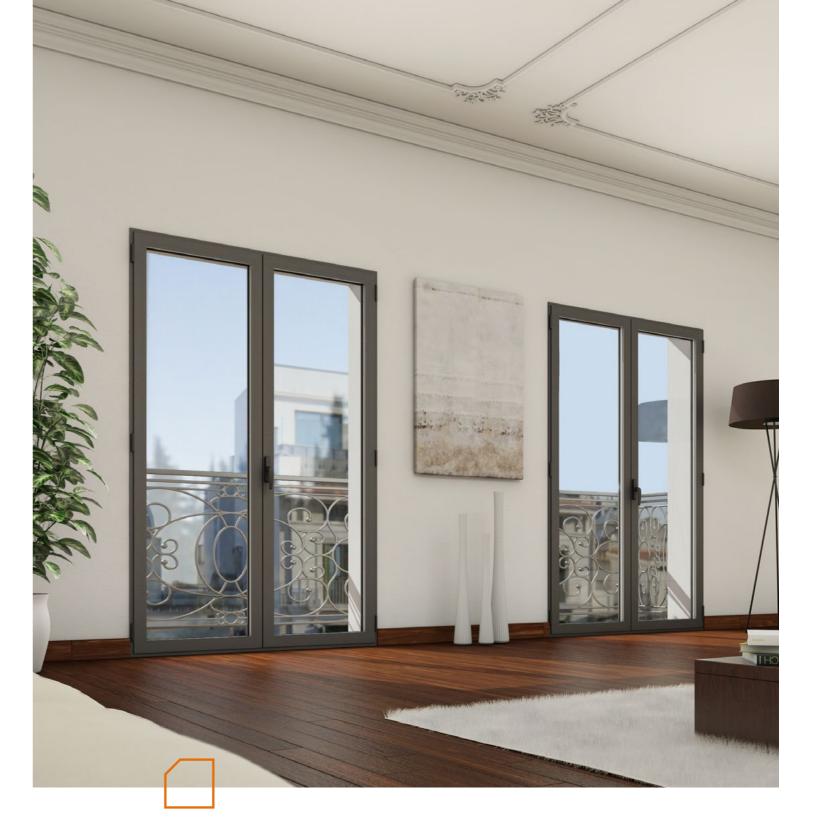


License number: ES-0009F

#### Certification



THERMIA BARCELONA EN14351-1:2006+A2:2016



# Guaranteed savings and well-being

<sup>\*</sup> Based on EN 10077-02 Single-leaf 1.5x2.4 balcony door glass Ug= 1.1  $\psi$ = 0.053

# Thermia® AR78 CE

**Extreme RPT Casement Series** 

Technical features <b>Thermia® AR78 CE</b>		
Thermal break	Yes / 24 mm	
Main frame	70 mm	
Main sash	78 mm	
Profile thickness	1.5 / 1.8 mm	
Maximum glass thikness	49 mm	
Maximum glass weight	90 Kg	
Tilt and turn leaf maximum weight	130 Kg	
16 mm channel	Yes	
Available profiles	Window / Door	

Uw window = **1.07 W/mk<sup>2\*</sup>** 

\* Based on EN 10077-02 Single-leaf 1.7x2.6 balcony door glass Ug= 0.7  $\psi$ = 0.046



Our product series



Acoustic attenuation up to 45 dB (Window size: 1230cm x 1450cm with acoustic laminated glass.)



#### Quality seals





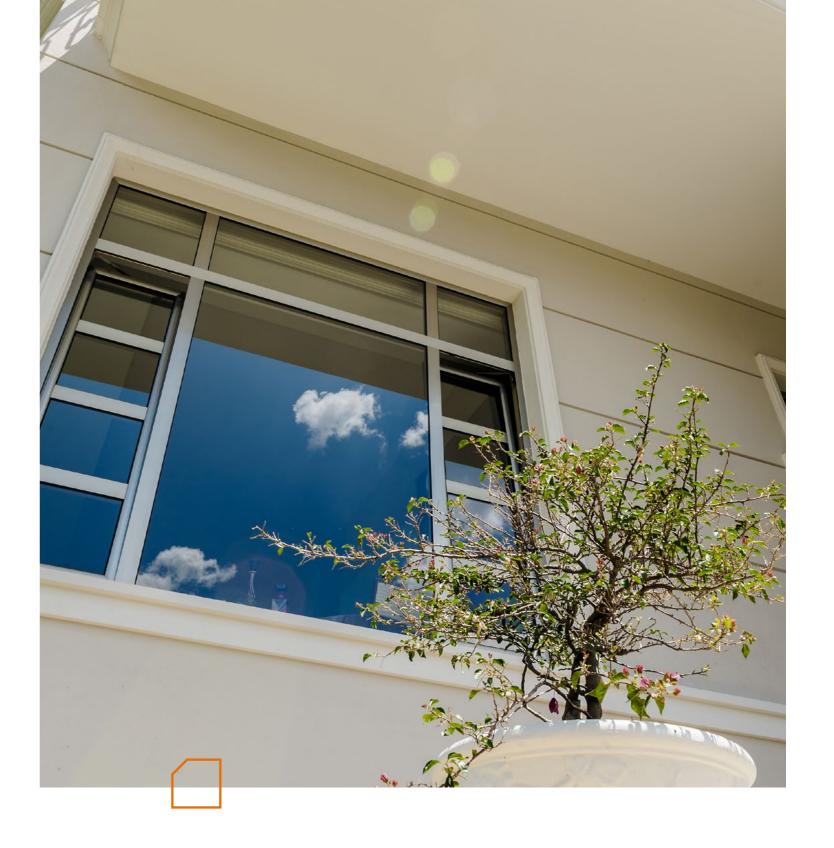




#### Certification



THERMIA BARCELONA EN14351-1:2006+A2:2016



# The solution for the most demanding clients

# Thermia® AF52 C16

Standard 16 Casement Series

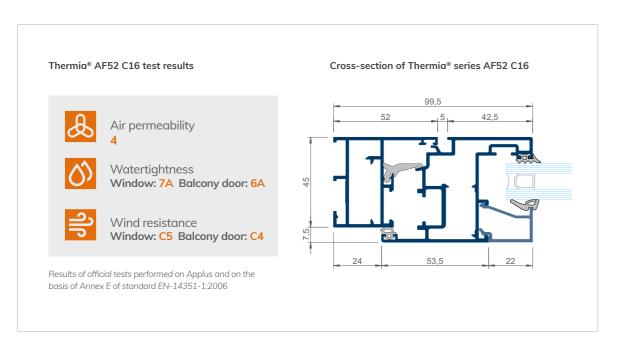
Technical features Thermia® AF52 C16		
Thermal break	No	
Main frame	45 mm	
Main sash	52 mm	
Profile thickness	1.5 mm	
Maximum glass thikness	27 mm	
Maximum glass weight	90 Kg	
Tilt and turn leaf maximum weight	100 Kg	
Available profiles	Window	

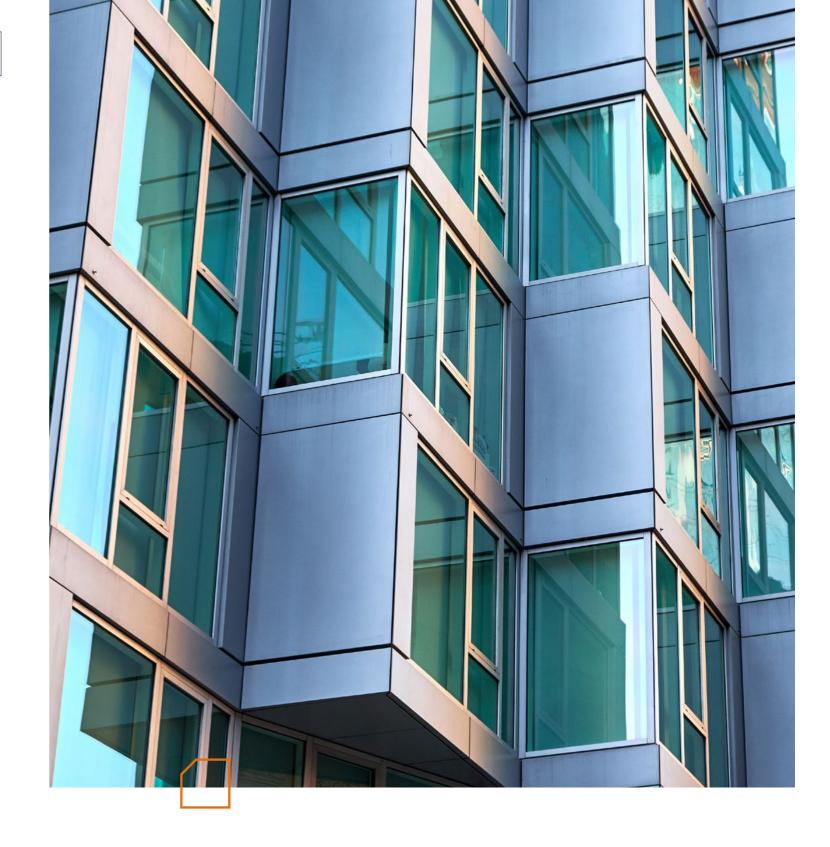


Our **product series** 



Acoustic attenuation up to 39 dB (Window size: 1230cm x 1450cm with acoustic laminated glass.)





#### Quality seals









Qualideco seal for the License number: ES-0009F

#### Certification



THERMIA BARCELONA EN14351-1:2006+A2:2016

# **Greater comfort** with a simple system

# Thermia® AR78+ C16

Extreme RPT 16 Casement Series

Technical features Thermia® AR78+ C16		
Yes / 24 mm		
70 mm		
78 mm		
1.5 / 1.8 mm		
49 mm		
90 kg / door 100 kg		
100 Kg		
Window / Door		





\* Based on EN 10077-02 Single-leaf 1.7x2.6 balcony door glass Ug= 0.7  $\psi$ = 0.046

Uw window = **1.17 W/mk**<sup>2\*</sup>

Acoustic attenuation up to 45 dB (Window size: 1230cm x 1450cm with acoustic laminated glass.)



Our **product series** 

#### Quality seals







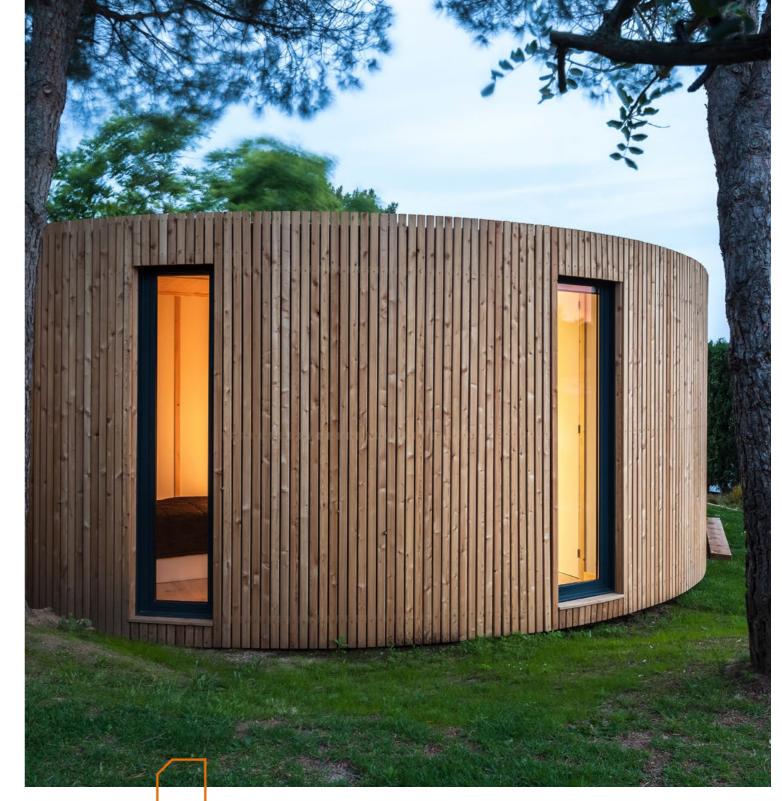


License number: ES-0009F

#### Certification







## Thermia® OC78+ C16

Ocult RPT 16 Casement Series

Technical features Thermia® AR78+ C16		
Thermal break	Yes / 24 - 32 mm	
Main frame	70 mm	
Main sash	66 mm	
Profile thickness	1.5 mm	
Maximum glass thikness	28 mm	
Maximum glass weight	90 Kg	
Tilt and turn leaf maximum weight	100 Kg	
Available profiles	Window	

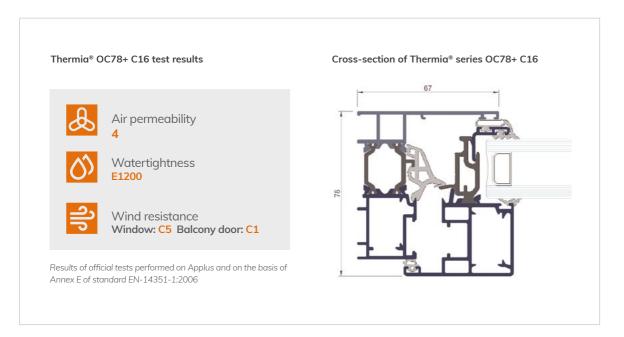
Uw window = **1.47 W/mk**<sup>2\*</sup>

\* Based on EN 10077-02 Single-leaf 1.2x2.4 balcony door glass Ug= 1,1  $\psi$ = 0.053



Our product series

Acoustic attenuation up to 41 dB (Window size: 1230cm x 1450cm with acoustic laminated glass.)



#### Quality seals



License number: 1014



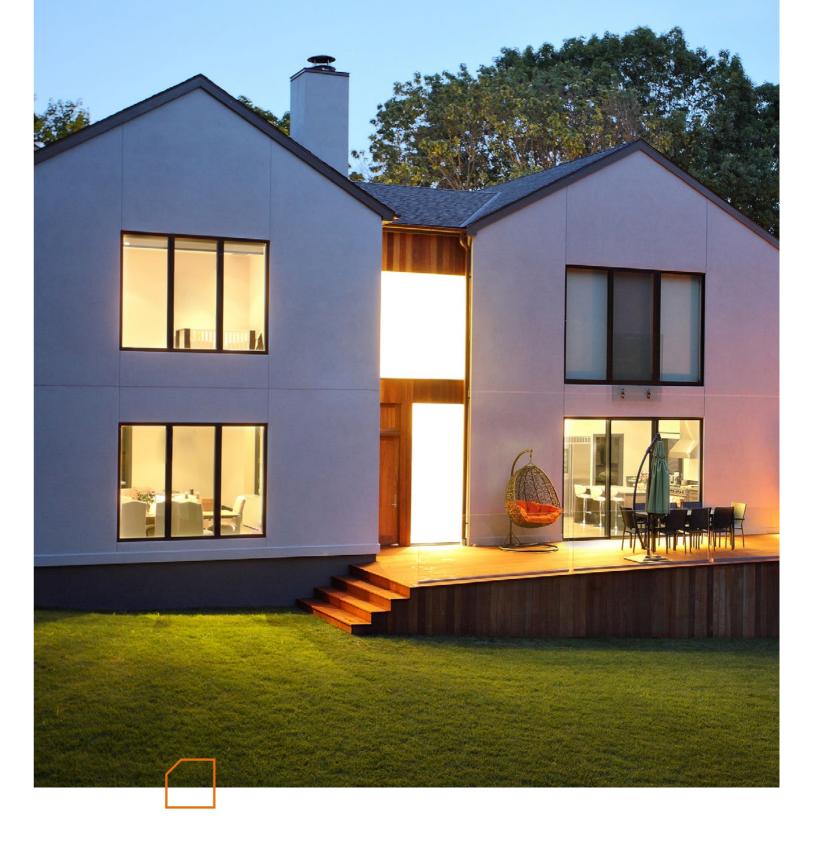


License number: ES-0009F

#### Certification



THERMIA BARCELONA EN14351-1:2006+A2:2016



# More luminosity with a slim look

**Basic Sliding Series** 

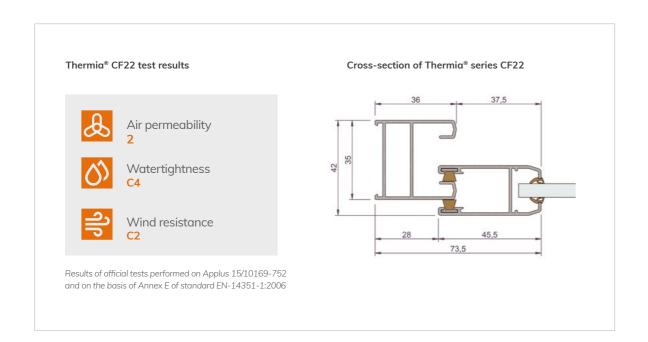
Technical features Thermia® CF22			
Thermal break	No		
Main frame	35 mm		
Main sash	22 mm		
Profile thickness	1.2 mm		
Maximum glass thikness	8 / 15 mm		
Maximum glass weight	80 Kg		
Track option	2 tracks		
90° frameless closure solution:	No		
Available profiles	Window / Door		



Our product series



Acoustic attenuation up to 33 dB (Window size: 1230cm x 1450cm with acoustic laminated glass.)



#### Quality seals



for the anodization License number: 1014





Qualideco seal for the License number: ES-0009F

#### Certification



THERMIA BARCELONA EN14351-1:2006+A2:2016



# **Design and comfort** for everyone

Basic+ Sliding Series

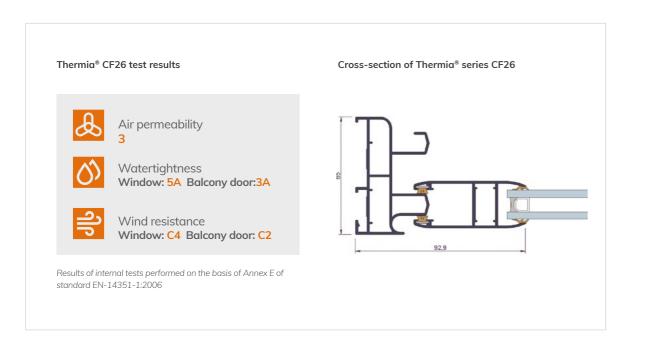
Technical features <b>Thermia® CF26</b>							
Thermal break	No						
Main frame	65 mm						
Main sash	26 mm						
Profile thickness	1.3 mm						
Maximum glass thikness	10 / 17 mm						
Maximum glass weight	120 Kg						
Track option	2, 3, 4 or more tracks						
Available profiles	Window / Balcony Door						
90° frameless closure solution:	No						



Our **product series** 



Acoustic attenuation up to 36 dB (Window size: 1230cm x 1450cm with acoustic laminated glass.)



#### Quality seals







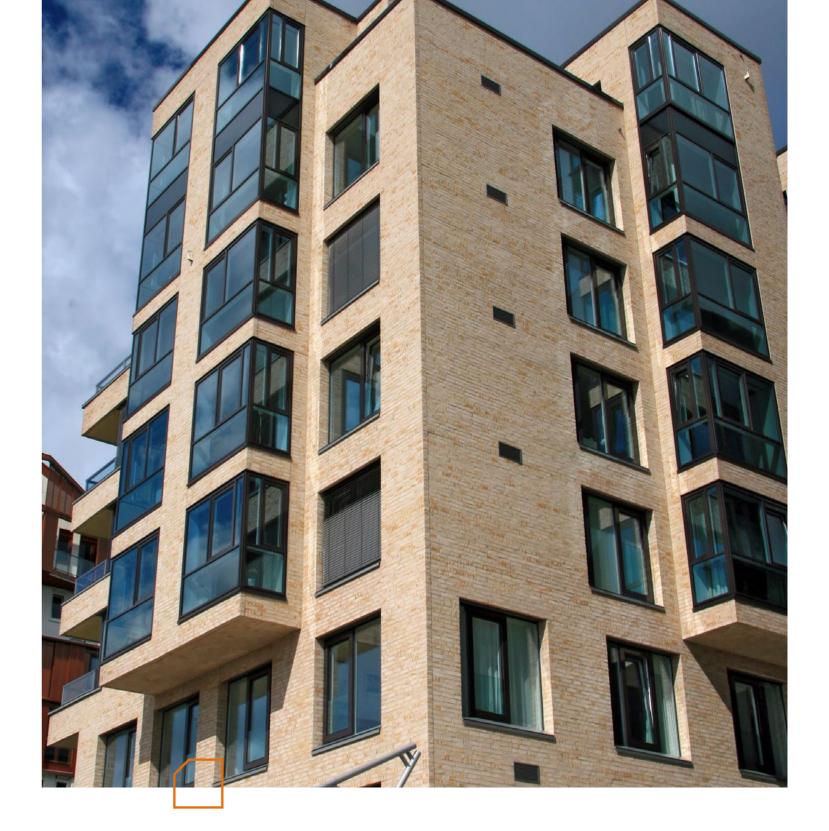


Qualideco seal for the License number: ES-0009F

#### Certification



THERMIA BARCELONA EN14351-1:2006+A2:2016



# **Extraordinarily** versatile windows

Standard Sliding Series

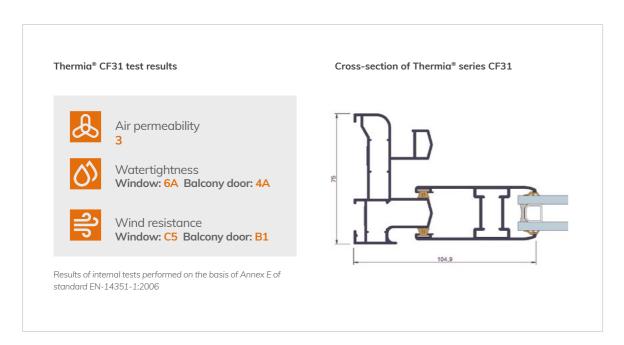
Technical features Thermia® CF31								
Thermal break:	No							
Main frame:	75 mm							
Main sash	31 mm							
Profile thickness	1.5 mm							
Maximum glass thikness	10 / 31 mm							
Maximum glass weight	160 Kg							
Track option	2, 3, 4 or more tracks							
Available profiles	Window / Balcony Door							
90° frameless closure solution:	Yes							



Our **product series** 



Acoustic attenuation up to 36 dB (Window size: 1230cm x 1450cm with acoustic laminated glass.)



#### Quality seals







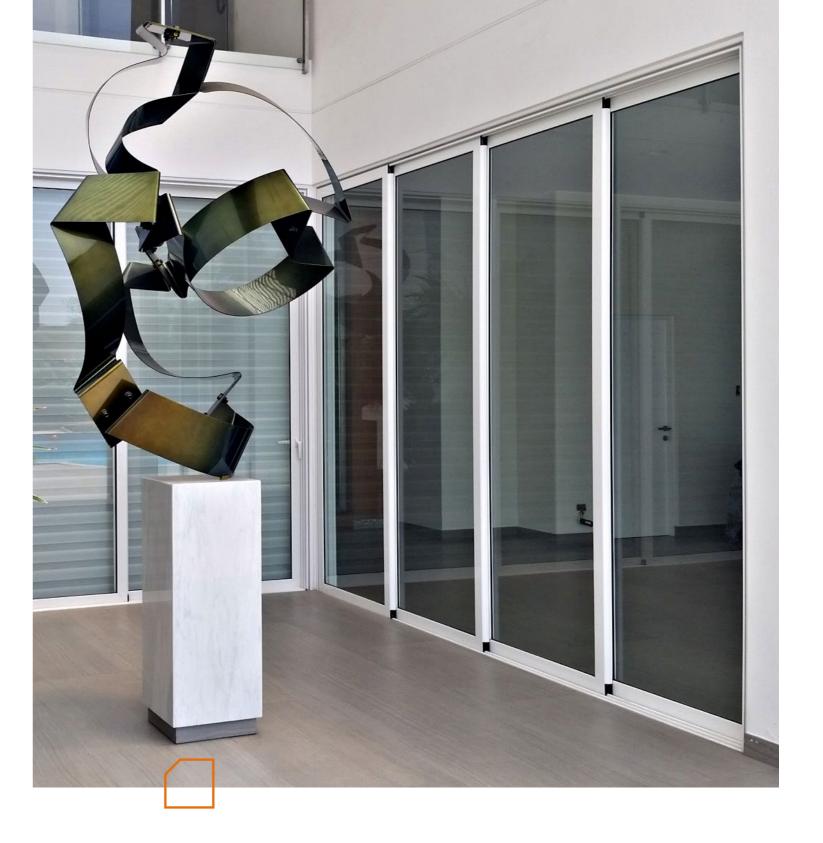


License number: ES-0009F

#### Certification



THERMIA BARCELONA EN14351-1:2006+A2:2016



# Enjoy the outdoors without sacrificing silence

#### Slim Sliding Series

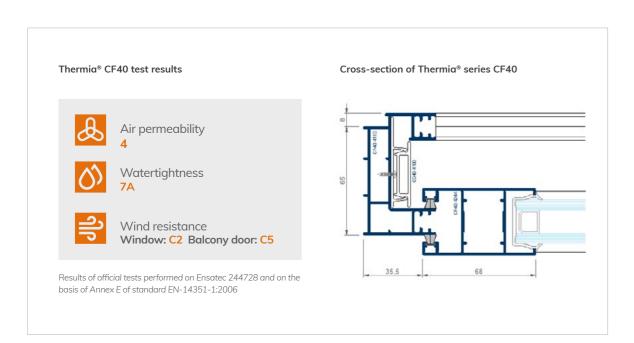
Technical features <b>Thermia® CF40</b>							
Thermal break	No						
Main frame	Perimeter cut 65 mm						
Main sash	Straight cut 40 mm						
Profile thickness	1.4 / 1.6 mm						
Maximum glass thikness	28 mm						
Maximum glass weight	160 / 200 kg						
Track option	2, 3 or more tracks						
Available profiles	Window / Balcony Door						
Stock colors	White / Silver						
Maximum glass weight  Track option  Available profiles	160 / 200 kg  2, 3 or more tracks  Window / Balcony Door						



Our **product series** 



Acoustic attenuation up to 39 dB. (Window size: 1230 x 1450 with acoustic laminated glass.)



#### Certification



Quality seals













EN14351-1:2006+A2:2016

# Sliding windows that can do it all.

#### Standard RPT Sliding Series

Technical features <b>Thermia® CR31</b>							
Thermal break	Yes / 14 - 25 mm						
Main frame	75 mm						
Main sash	31 mm						
Profile thickness	1.5 mm						
Maximum glass thikness	24 mm						
Maximum glass weight	160 Kg						
Track option	2, 3, 4 or more tracks						
Available profiles	Window / Balcony Door						
90° frameless closure solution:	Yes						

Uw window = **1.79 W/mk**2\*



Our product series



Acoustic attenuation up to 37 dB (Window size: 1230cm x 1450cm with acoustic laminated glass.)



#### Quality seals



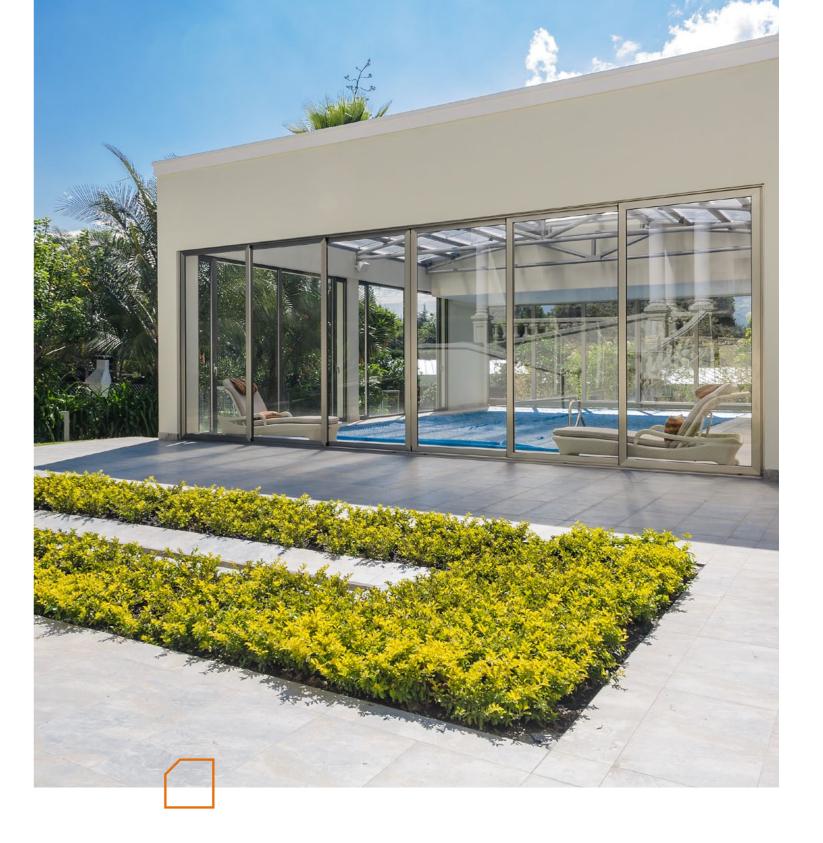




#### Certification



THERMIA BARCELONA EN14351-1:2006+A2:2016



# Windows to bring together the outdoors and the indoors

<sup>\*</sup> Based on EN 10077-02 2.8x2.2 balcony door

Slim RPT Sliding Series

Technical features <b>Thermia® CR40</b>							
Thermal break	Yes						
Main frame	Perimeter cut 65 mm						
Main sash	Straight cut 40 mm						
Profile thickness	1.4 / 1.6 mm						
Maximum glass thikness	28 mm						
Maximum glass weight	160 / 200 Kg						
Track option	2, 3 or more tracks						
Available profiles	Window / Balcony Door						
Stock colors	White / Silver						

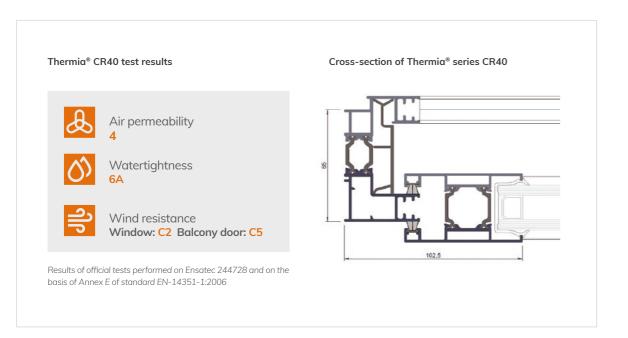
Uw window = **1.58 W/mk**<sup>2\*</sup>



Our product series



Acoustic attenuation up to 40 dB (Window size: 1230cm x 1450cm with acoustic laminated glass.)



#### Quality seals



License number: 1014



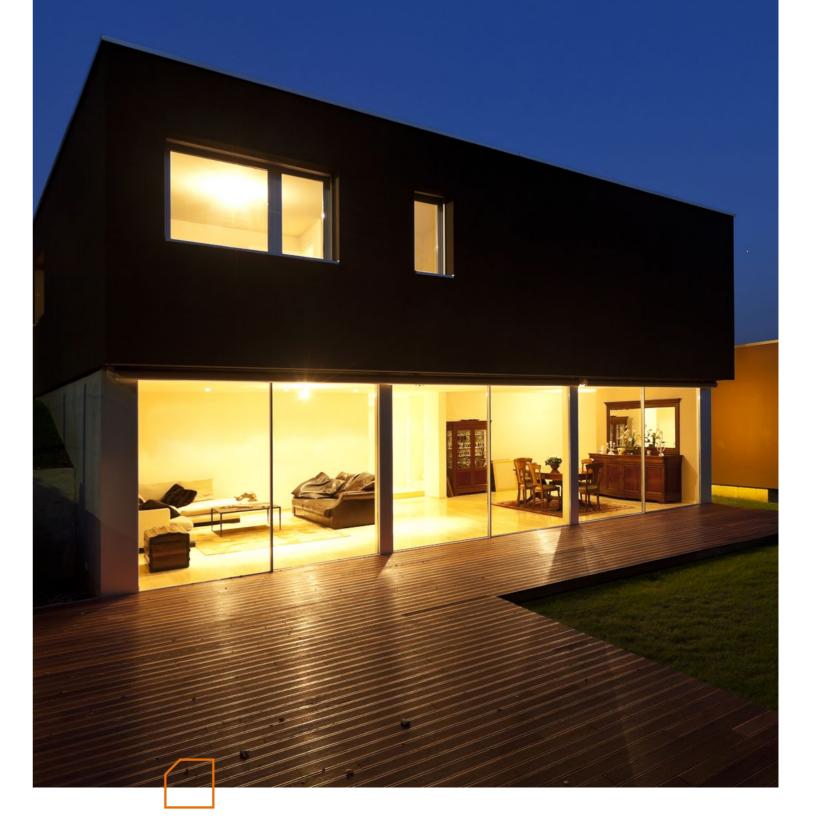


Qualideco seal for the License number: ES-0009F

#### Certification



THERMIA BARCELONA EN14351-1:2006+A2:2016



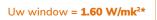
# The perfect solution for today's architecture

<sup>\*</sup> Based on EN 10077-02 3.2x2.4 balcony door glass Ug=  $1.1 \psi$ = 0.053

# Thermia® CR46 MAGNA

**RPT Sliding Series** 

Technical features Thermia® CR46 MAGNA							
Thermal break	24 mm						
Main frame	65 mm						
Main sash	46 mm						
Profile thickness	1.6 mm						
Maximum glass thikness	34 mm						
Maximum leaf weight	300 Kg /leaf						
Track option	2, 3 or more tracks						
Available profiles	Window / Balcony Door						
90° frameless closure solution:	Yes						



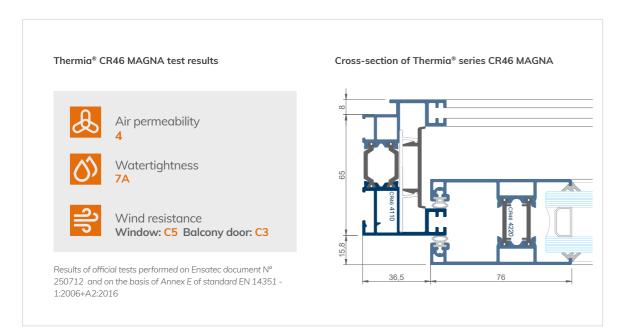
Profile Uf = 3.22 W/mK<sup>2</sup>

\* Based on EN 10077-02 Balcony Door 2800 x 2250 glass Ug= 1.0  $\psi$ g= 0.053



Our product series

Acoustic attenuation up to 38 dB with acoustic laminated glass of 44.A/cam/44.A composition (window measuring 1230 x 1450)



#### Quality seals



for the anodization License number: 1014



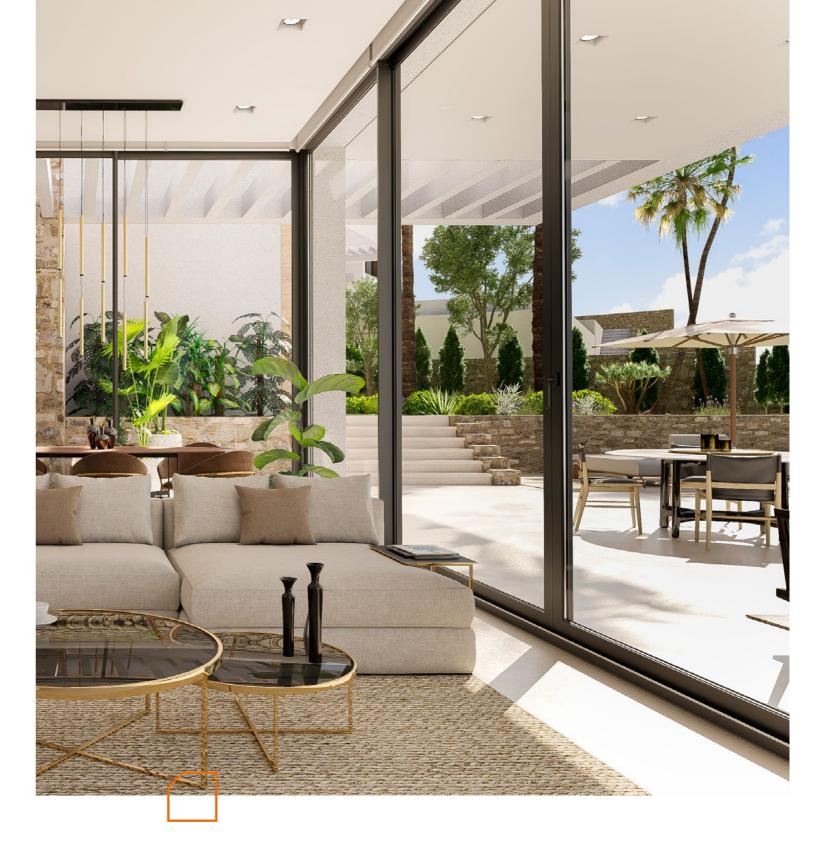


License number: ES-0009F

#### Certification



THERMIA BARCELONA EN14351-1:2006+A2:2016



# **Connect** with the outdoors

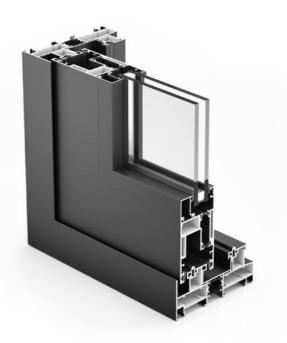
# Thermia® ER52

RPT Lift & Slide

Technical features <b>Thermia® ER52</b>							
Thermal break:	Yes / 24 - 14 mm						
Main frame:	125 mm						
Main sash	52 mm						
Profile thickness	1.8 mm						
Maximum glass thikness	30 mm						
Maximum glass weight	350 Kg						
Track option	2 or 3 tracks						
Available profiles	Window / Balcony Door						
90° frameless closure solution:	No						

Uw window = **1.84 W/mk**<sup>2\*</sup>

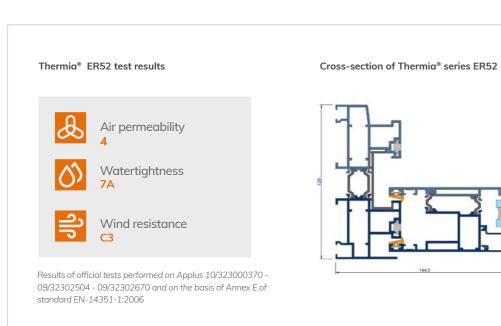
\* Based on EN 10077-02 4.5x2.8 balcony door glass Ug=  $1.1 \psi$ = 0.053



Our product series



Acoustic attenuation up to 44 dB (Window size: 1230cm x 1450cm with acoustic laminated glass.)



#### Certification



EN14351-1:2006+A2:2016

#### Quality seals

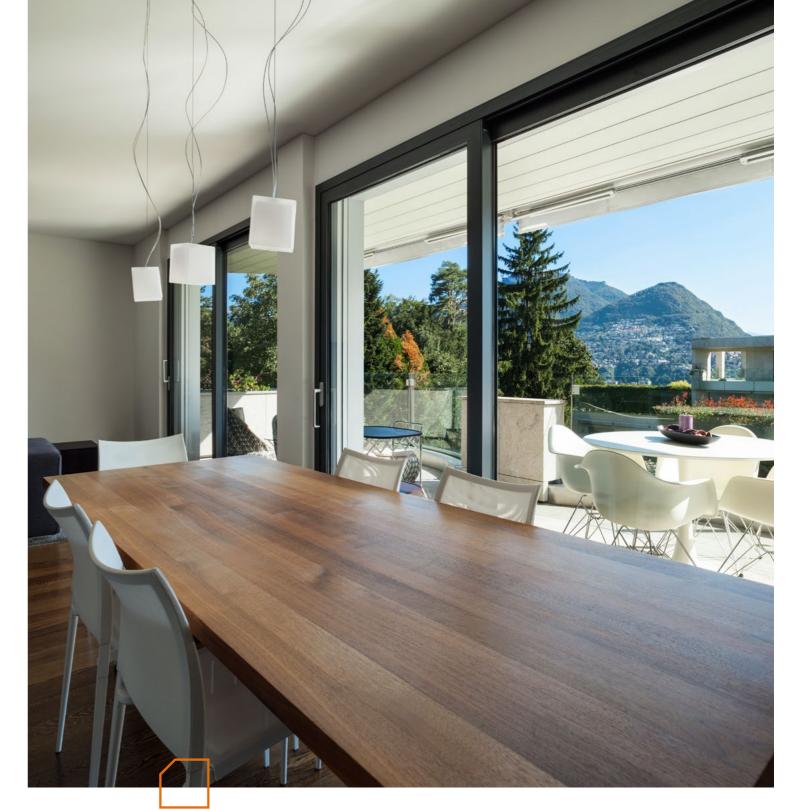


License number: 1014





License number: ES-0009F



# Size is not a problem

#### Thermia® Shutter Series with 4 kinds of slats and glass.

## Thermia® PM

Sun & sight protection and security series

#### Fixed slat shutter

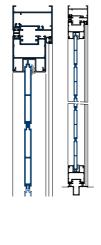
The solution for sun protection and ventilation, protecting the privacy of guests.



#### Blind slat shutter

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





#### Movable slats shutter

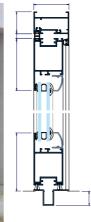
Slat position can be adjusted, allowing the user to position them as desired at any time.



#### Glass slide & folding

Commonly used with exterior and interior folding closures, for dividing interior space.







# **Mediterranean style**

Thermia® Shutter

The Thermia ® shutter takes its inspiration from the ancient wooden shutters 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.

Design Comfort **Silence** 

#### Thermia® PM

Sun & sight protection and security series

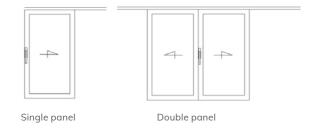
#### **Opening systems**

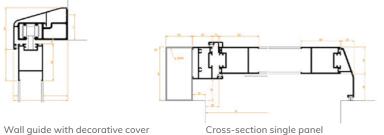
#### **Sliding** shutter system

- The sliding shutter 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 trucks.
- The wall guide is manufactured with a decorative cover for a more elegant look.
- The ability to slide all the panes laterally means that the window opening can be left completely unobstructed.

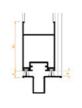








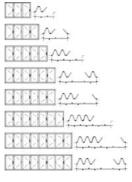




Embedded lower guide

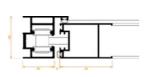
#### Folding shutter system

- 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)





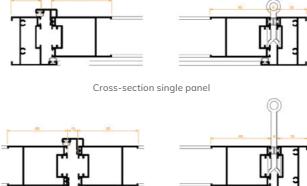




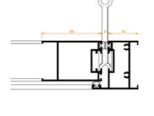
#### Windows for a better life

#### **Casement** shutter system

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



Cross-section double panel

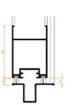








- Decoration of the facade.
- Greater protection against robbery.
- Solar protection in buildings and residences.





Overlapping lower guide



Upper ceiling guide



**Mosquitoes screen** 

Insect protection series

# A versatile system offering effective protection against mosquitoes.

- + 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.



#### Impeccable aesthetics

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

#### Easy to manufacture and install

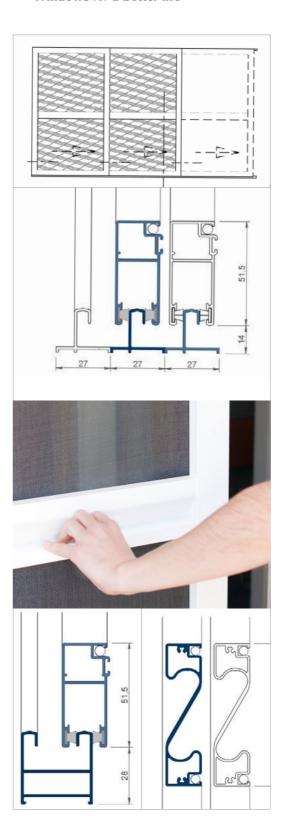
Highly intuitive manufacture and installation All you need are the same fixtures and accessories used with the Thermia Barcelona® windows

#### 100% Adaptable

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







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

Thanks to the use of robust profiles and the assembly system, large-format panels can be assembled with whatever combination works best.

While other products on the market have a very short useful life, The Thermia MQ22 mosquito screen has been specially designed to last a long time in large openings.



# **Protection** against insects.

Thermia® MQ22

#### Thermia® AF52M **Mullion**

Light structural series

#### Technical features Thermia® AF52M - Mullion

Compatible with the Thermia® AF52 series, an upright and crossbeam system measuring 85 mm and 125 mm.

Glass panes supported mechanically by the moldings of the Thermia system.

Wide range of glazing.

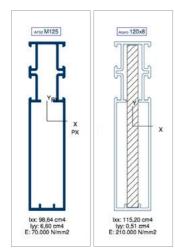
Ability to mount outward-opening sash from the AF52 series.

Ability to attach any sliding or casement window from the Thermia system to

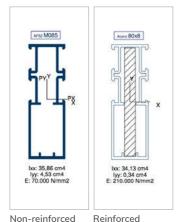
Option of internal steel reinforcement to increase strength (ExY module).

Many combinations can be achieved by attaching a screw-on blades or glazing bead in multiple positions.

#### Inertias

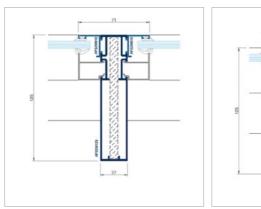


Non-reinforced Reinforced

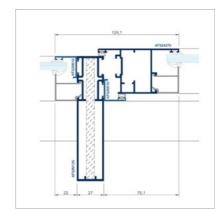


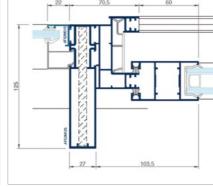
Reinforced

#### **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

#### Quality seals



for the anodization

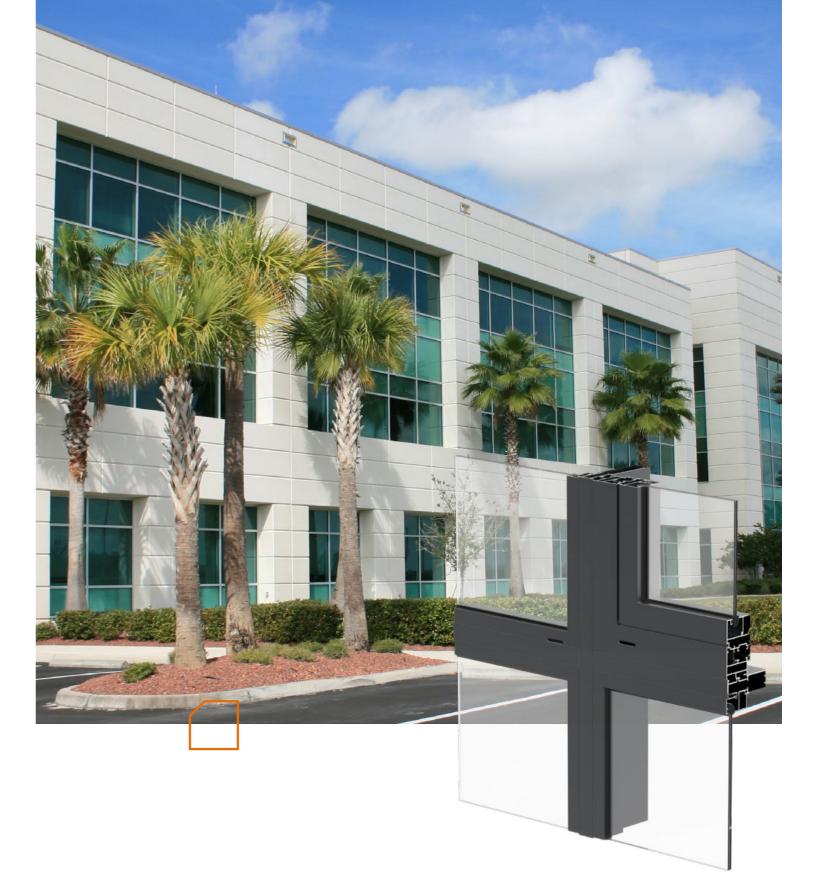


imitation wood License number: ES-0009F

Certification



DIMAC SL 2018 Accessories EN 1435-1: 2006 THERMIA BARCELONA® SERIES



# Thermia® AF52M 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.

# OTECTION AND SECURITY / Thermia® GLASS RAI

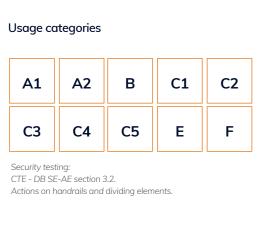
### Thermia® GR48

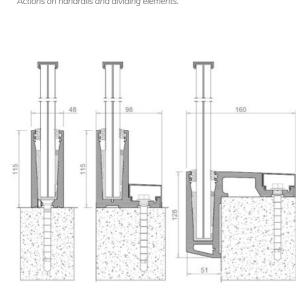
Glass rail series



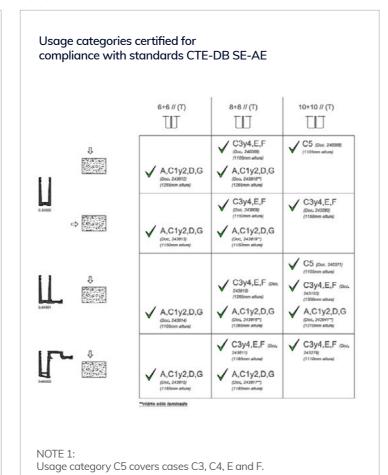
Our **product series** 

#### Tests





#### Performance



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

#### Quality seals



Qualanod seal for the anodization



Qualicoat seal for the lacquer



Qualideco seal for the imitation wood

#### Certification



THERMIA BARCELONA EN14351-1:2006+A2:2016



# **Minimalist security**

#### Thermia® GR48

#### Extrusion alloy

- 6060.

#### State of supply

- T6 - T66.

#### **Dimensions**

- Profile depth 48 mm.
- Cross-section view 115 mm.

# Construction options

- On the floor.

- On the edge of the floor.
- Recessed.

#### Glazing

- 6+6 T (Butyrals)
- 8+8 T (Butyrals)
- 10+10 T (Butyrals)

#### Principal characteristics

- CTE DB SE-AE approval for all usage categories\*.
- Double anti-lift system for glazing.

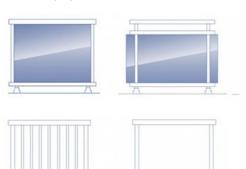
- Protective seating for glass, with impact resistance and high load-bearing capacity.
- Mechanical adjustment for leveling on the floor.
- Compatible with alignment strings and connecting angles.
- Integrated water drainage, caps and external anodic protection.

Windows for a better life

# Thermia® Railing

Railing series

#### Assembly options







# Safety and elegance

### Thermia® Railing

Our **product series** 

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.

Quality seals



License number: 1014





Certification



THERMIA BARCELONA EN14351-1:2006+A2:2016

#### Thermia® Louvers

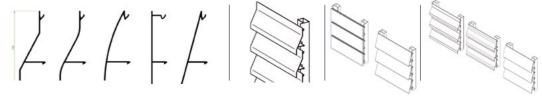
Solar protection series

Ventilation system with varying distances between slats.

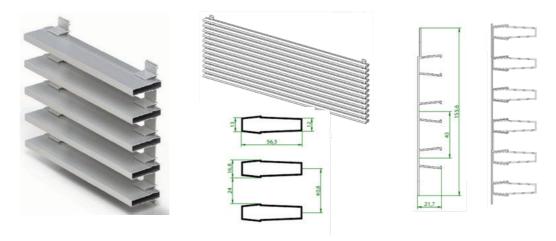
- + -10 mm, 0 mm, 10mm.
- + Slat thickness 1.4 mm.
- + Clip fastening system.







**VELAM LOUVRES** 



# **Protection and ventilation**

Thermia® Louvers

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.

# **Manufacture Thermia®** Windows anywhere in the world.

Our Thermia® systems distribution division serves window manufacturers, offering the following advantages to metal carpentry workers:

#### **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.













Design

Comfort Silence

Thermia® window manufacturers benefit from optimized inventory management, personalized 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.

#### THE THERMIABARCELONA.COM

# 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.

professionals in Thermia® windows manufacture, 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: Service to all companies in the construction, architecture, and remodeling industries:



# 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.





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





As part of the fight against energy waste and worldwide CO2 emissions, European authorities connected to the 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 construction 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 wellbeing that we all want.

# How the noise pollution affect 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

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?



Design

**Comfort** Silence





Accordina WHO to the (World Health Organization) it establishes the maximum levels at 50-60 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.

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

It is not possible to halt the consequences of these pollution 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.

# 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) do not alter the acoustic properties.

> However, acoustic laminated glass attenuates more than the same thickness of float glass.

> > The window must guarantee the maximum possible air-tightness.

Any minor crack in the closure represents an air inlet and, therefore, noise.

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

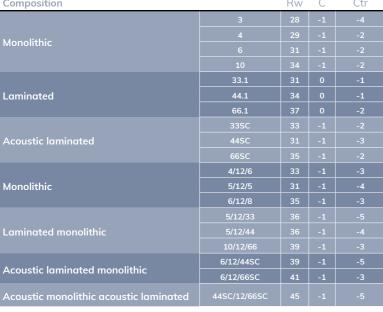
> The thicker the glass, the greater the attenuation. It is advisable to fit thicker glass, keeping in mind its

of thickness).

weight (2.5 kg per m2 and mm

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

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



Composition



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.

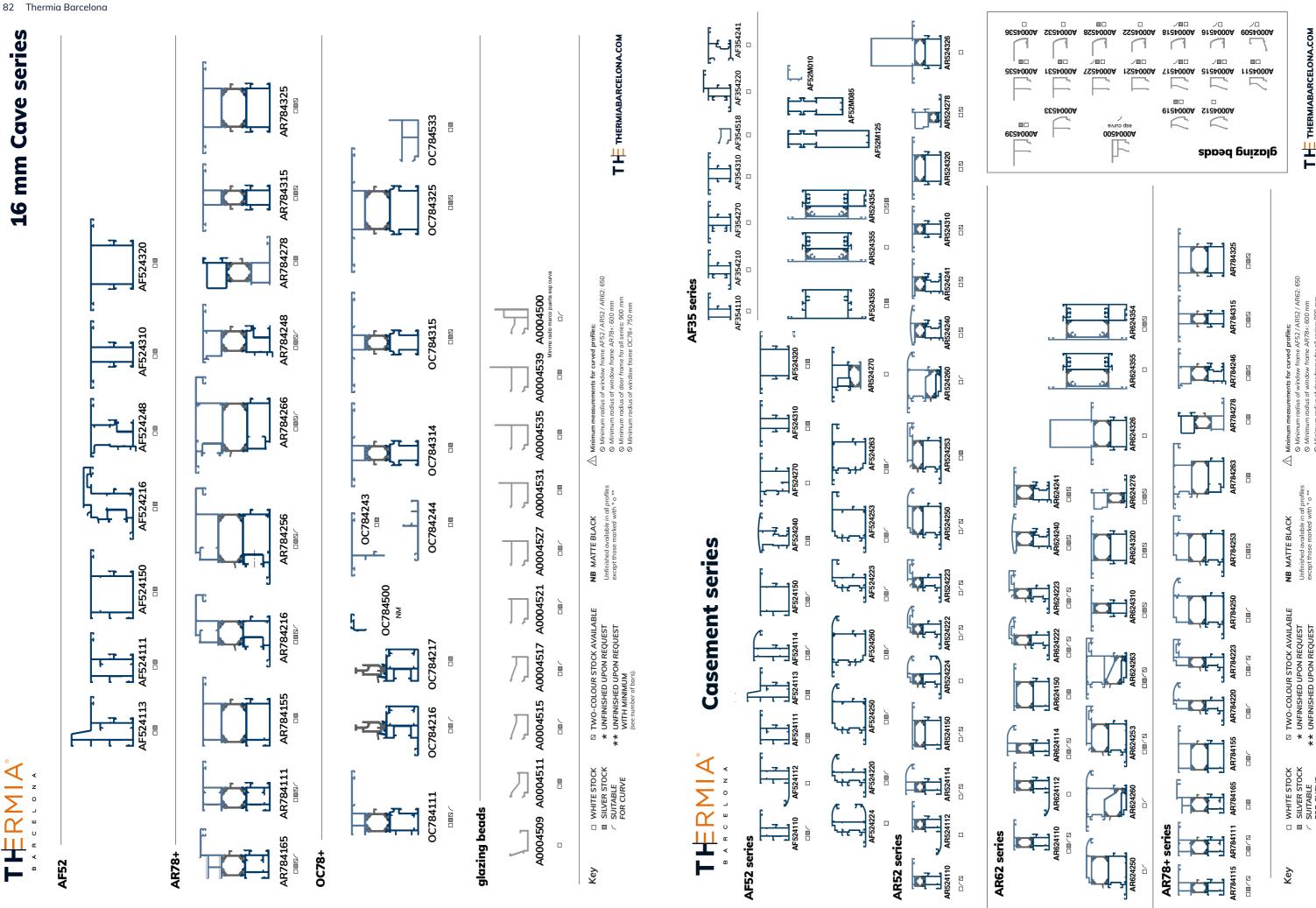
30 dB Bedroom. Quiet refrigerator.

20 dB Quiet rustling of tree leaves.

10 dB Quiet breathing.

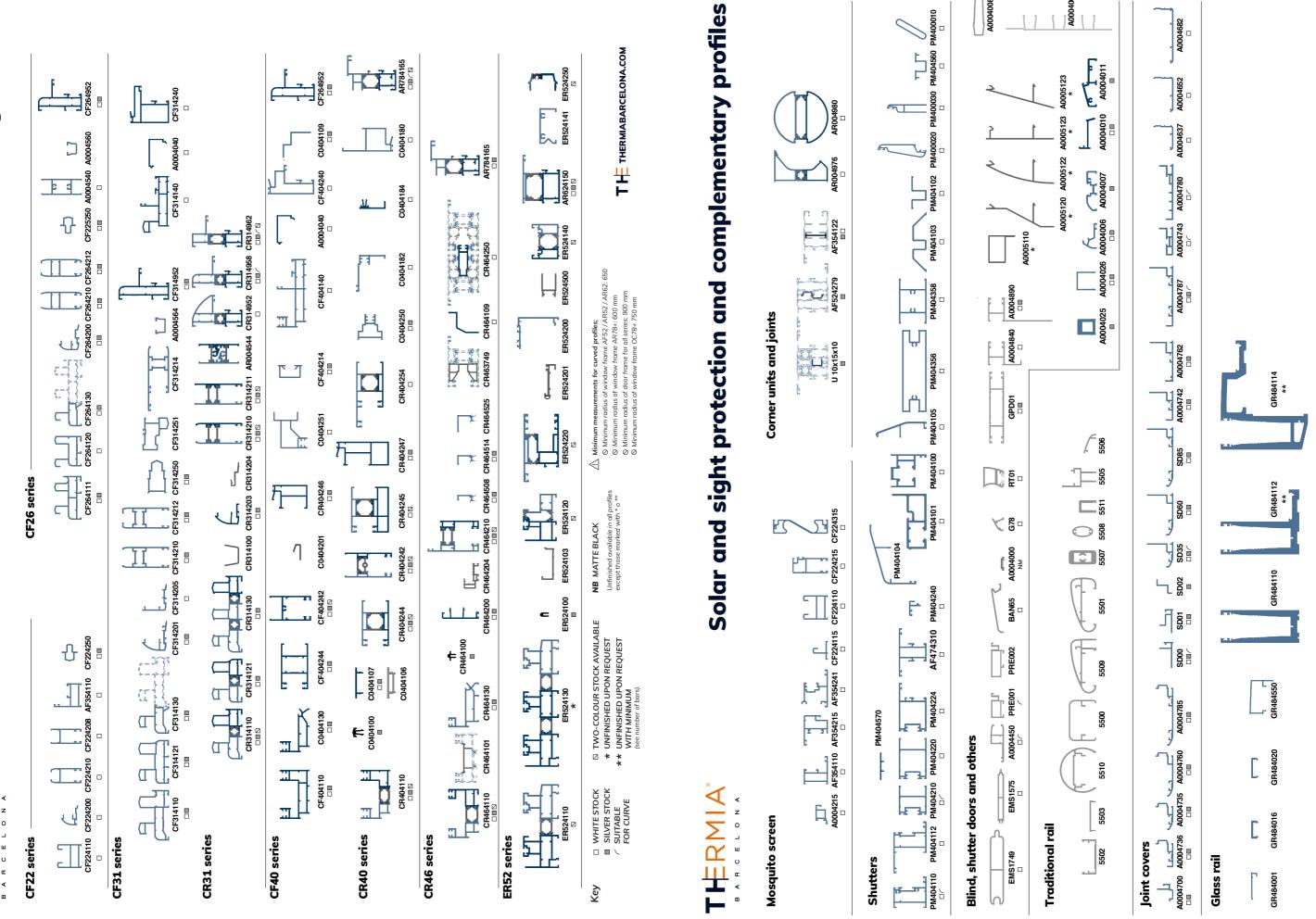
Glass composition and its acoustic attenuation.





THE THERMIABARCELONA.COM





TH THERMIABARCELONA.COM

Minimum me

Minimum r

Minimum r

Minimum r

Minimum r

NB MATTE BLACK
Unfinished available in all profiles except those marked with \* o \*\*\*

TWO-COLOUR STOCK AVAILABLE

\* UNFINISHED UPON REQUEST

\* UNFINISHED UPON REQUEST

WITH MINIMUM

(See number of bars).

. □ \* \* . □ \* \*

WHITE STOCK SILVER STOCK SUITABLE FOR CURVE

Key



# **Technical charts** of the Thermia® systems



#### Thermia® sliding series

Series	RPT Series	mm Frame / sash POLYAMIDE	Uw WINDOW* up to	mm MAIN FRAME	mm MAIN SASH	mm PROFILE THICKNESS	mm MAXIMUM GLASS
Thermia® ER52	Yes	24/14	1.84*	125	52	1.8	30
Thermia® CR46	Yes	24/25	1.65*	65	46	1.6 / 1.8	28
Thermia® CR40	Yes	24	1.53*	65	40	1.4 / 1.6	28
Thermia® CF40	No	No	-	65	40	1.4 / 1.6	28
Thermia® CR31	Yes	14/25	1.79*	75	31	1.5	24
Thermia® CF31	No	No	-	75	31	1.5	10 / 21
Thermia® CF26	No	No	-	65	26	1.3	10 / 17
Thermia® CF22	No	No	-	35	22	1.2	8/15

<sup>\*</sup>Uw: According to standard EN 10077. See the details of the values in each series' specifications sheet.

SERIES	MAXIMUM GLASS WEIGHT (kg)	3 TRACK OPTION	4 OR MORE TRACKS	AVAILABLE PROFILES	COLORS IN STOCK	
Thermia® ER52	350	Yes	No	Window / Balcony Door	Raw	
Thermia® CR46	180	Yes	Yes Window / Balcony Dod		Raw/Silver/White	
Thermia® CR40	160 / 200 kg	Yes	Yes	Window / Balcony Door	Raw/Silver/White	
Thermia® CF40	160 / 200 kg	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	



#### Thermia® casement series

SERIES	RPT Series	mm POLYAMIDE Frame / sash	Uw WINDOW* up to	mm MAIN FRAME	mm MAIN SASH	mm PROFILE THICKNESS
Thermia® AF52 C16	No	No	-	45	52	1.5-1.8
Thermia® AR78+ C16	nia® AR78+ C16 Yes		1.17*	70	78	1.5-1.8
Thermia® OC78+ C16	Yes	24	1.47*	70	66	1.5
Thermia® AR78+ CE	Yes	24	1.07*	70	78	1.5-1.8
Thermia® AR62 CE	Yes	24	1.46*	55	62	1.5-1.8
Thermia®AR5 CE	Yes	14	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

<sup>\*</sup>Uw: According to standard EN 10077. See the details of the values in each series' specifications sheet.

SERIES	MAXIMUM GLASS (mm)	MAXIMUM GLASS WEIGHT WITH CASEMENT GLASS SYSTEM (kg)	MAXIMUM GLASS WEIGHT WITH TILT AND TURN SYS- TEM (kg)	AVAILABLE PROFILES	COLORS IN STOCK	
Thermia® AF52 C16	27	80	100	Window	Raw/Silver/White	
Thermia® AR78+ C16	49	80	100	Window / Door	Raw/Silver/White	
Thermia® OC78+ C16	28	90	100 (C16)	Window	Raw/Silver/White	
Thermia® AR78+ CE	49	90 (CE)	130 (CE) 100 (C16)	Window / Door	Raw/Silver/White	
Thermia® AR62 CE	37 90		130	Window / Door	Raw/Silver/White	
Thermia® AR52 CE	27 90		130	Window / Door	Raw / White	
Thermia® AF52 CE	E 27 90 (CE)		130 (CE) 100 (C16)	Window / Door	Raw/Silver/White	
Thermia® AF35	8/21	90	130	Window	Raw / White	

# **Acoustic properties** of glazed windows

Design Comfort Silence

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

#### **Annotations:**

Spectral adaptation term of the sound reduction index for incident pink noise, in dB.

Spectral adaptation term of the sound reduction index for automobile noise, in dB.

Global sound reduction index, A weighted, in dBA.

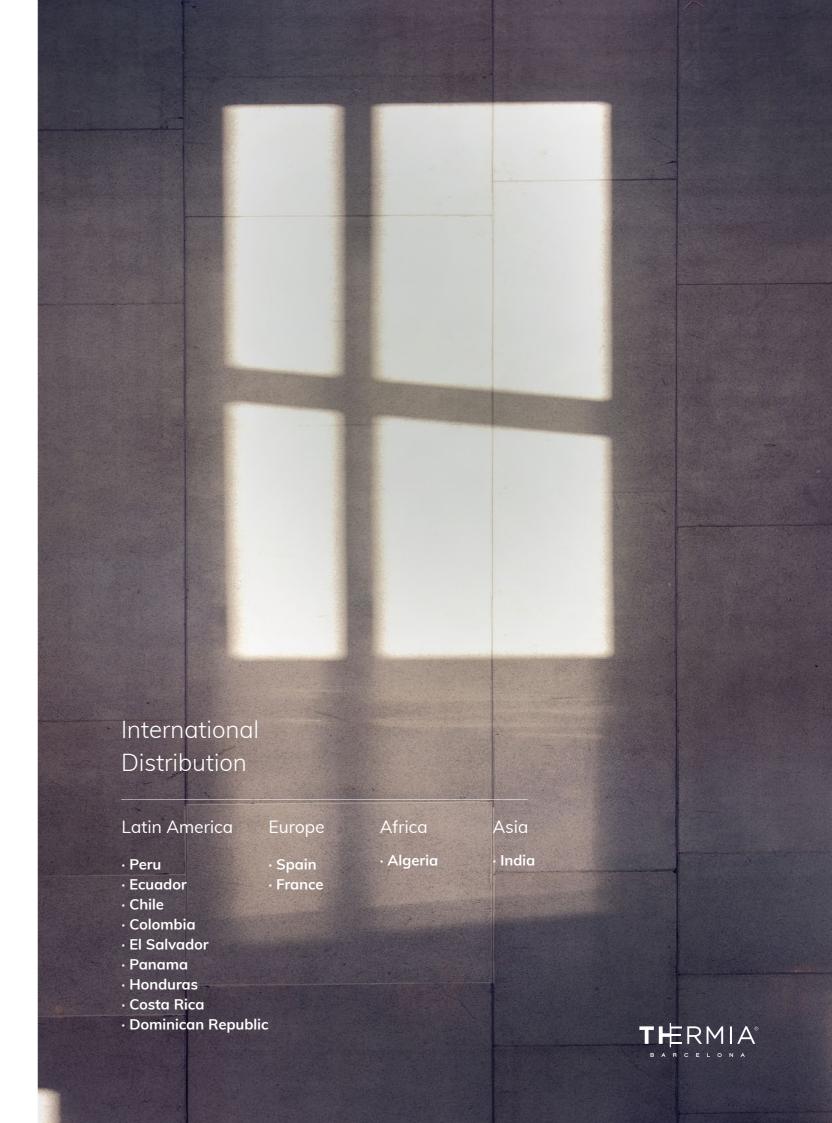
RA,tr Global sound reduction index, A weighted, for automobile noise, in dBA.

Global sound reduction index, in dB.

ACOUSTIC INSULATION VALUES FOR WINDOWS with a surface area of up to 2.7 m <sup>2</sup>											
Compo	THERMIA® Series										
		CF31	CF40 / C	R31 / CR4	10 / CR46	/ ER52		AF52 / AF	R52 / AR6	2 / AR78+	+
Туре	Thickness (mm)	Rw (dB)	C (dB)	Ctr (dB)	Ra (dBA)	Ra,tr (dBA)	Rw (dB)	C (dB)	Ctr (dB)	Ra (dBA)	Ra,tr (dBA)
	6	28	-1	-1	27	27	31	-2	-3	29	28
Divis along	8	29	-1	-2	28	27	32	-2	-3	30	29
Plain glass	10	29	-1	-2	28	27	33	-2	-3	31	30
	12	29	-1	-1	28	28	34	0	-2	34	32
	3+3										
	4+4										
Laminated glass (0.36	6+6	29	-1	-2	28	27	32	-1	-3	31	29
butyral)	8+8	29	-1	-2	28	27	33	-1	-3	32	30
	10+10	29	-1	-2	28	27	34	-1	-3	33	31
	4/(620)/4	27	-1	-2	26	25	32	-1	-5	31	27
	4/(620)/6	29	-1	-2	28	27	34	-1	-4	33	30
Insulated glass	4/(620)/8	29	-1	-2	28	27	34	-1	-4	33	30
units (air chamber measuring	4/(620)/10	29	-1	-2	28	27	35	-1	-4	34	31
6 mm to 20 mm)	6/(620)/6	28	-1	-2	27	26	33	-1	-4	32	29
	6/(620)/8	29	-1	-2	28	27	35	-1	-5	34	30
	6/(620)/10	29	-1	-1	28	28	35	-1	-3	34	32
Insulated glass	6/(620)/6+6	29	-1	-2	28	27	34	-1	-4	33	30
with laminated panes	6/(620)/10+10	-	-	-	-	-	36	-1	-4	35	32

	Total surface area of the windows	Correction factor to be applied to RA and RAtr
Correction	2.7 m2 < A ≤ 3.6 m2	-1 dB
by side:	3.6 m2 < A ≤ 4.6 m2	-2 dB
	4.6 m2 < A	-3 dB







































Windows for a **better life** 





Design. Comfort. Silence.

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