The Architect's Toolbook

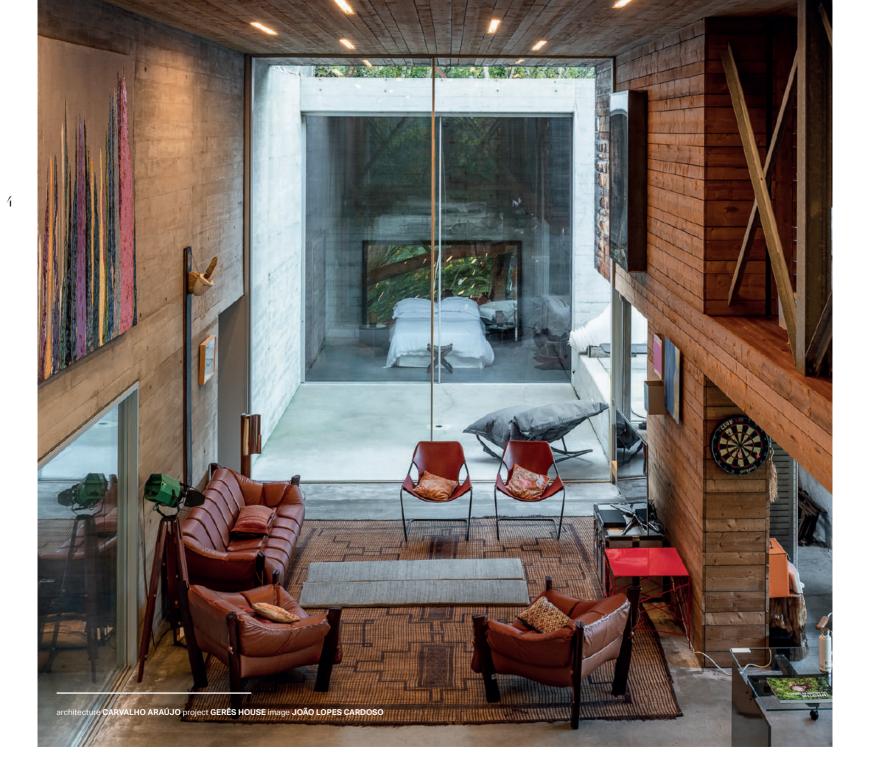
I.

OTIIMA

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OTIIMA HOUSE

An iconic showroom designed for an exclusive experience immersed in the marvellous Geres National Park. A unique project featured in "World's Most Extraordinary Homes", OTIIMA is undoubtedly the place where brand enthusiasts, friends and customers meet.





Contents

6

01 — Inspirational

09-57

02 Technical Data Sheets

58-99

03 Customizations

100-121

04—Colours Palette

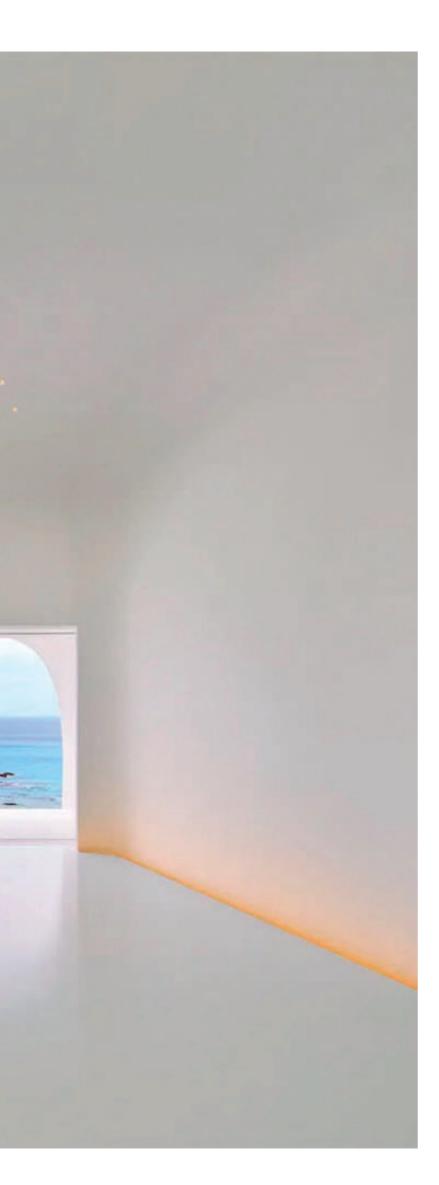
05 Behind the Scenes

124-135

122-123



architecture MARIKO MORI project YUPUTIRA HOUSE image YOSHIHIRO MAKIN



an extraordinary journey

Welcome to the state of being much more than a window: An extraordinary journey that has just started; from the heart of the industrial factories of Portugal to the glamorous sights of Cote d'Azur, catching the sunsets in the wild deserts of Colorado and then flying towards Tel Aviv's vibrant cultural scene, in every corner of the world OTIIMA passionately continues to fulfil its mission: to place a new window in every space and every building.

This is the story of a holistic approach, enthusiastically taking into account the person, the moment, the landscape, the physical space and human behaviour, emotions, and the architect's ambitions when designing cutting-edge window frames.

This is how it becomes the brand's duty to examine the way that the design of a Plus frame or Drain system will appear aesthetically- in context. OTIIMA genuinely embraced the responsibility that its expansive glass walls and clean lines should provide calming interior spaces for living and entertaining.

OTIIMA customers love nature, natural light, mid-century and contemporary design, functionality and safety, innovation, and heritage. An unexplainable relationship is born between the customer and the environment with the presence of a window, defining identity of the place and its expansion.

Maybourne Riviera Wilmotte & Associés SAS d'Architecture





Project by OTIIMA

Photographer WEARECONTENTS

System 38 Fusion





One Living Frederico Valsassina Arquitectos



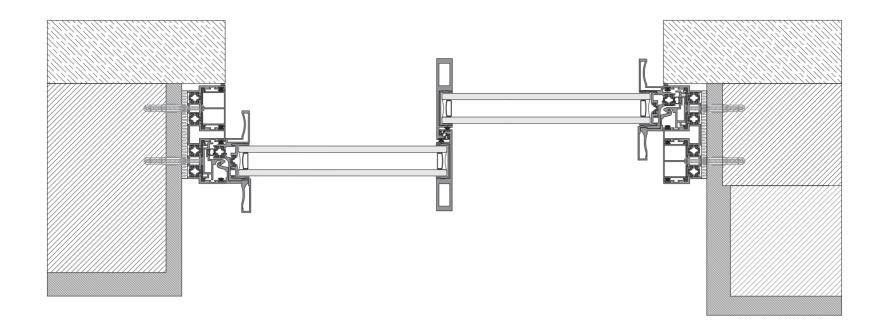


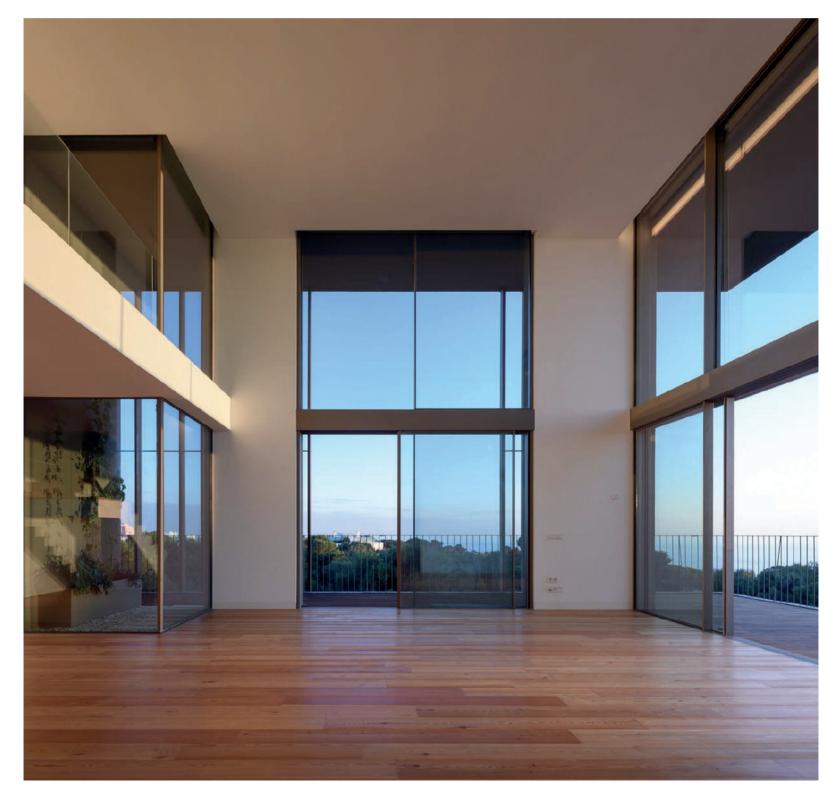
Project by OTIIMA

Photography courtesy of One Living

System 38 Plus







Architecture Faculty of Tournai

Aires Mateus





Project by OTIIMA Belgium **Photographer** Tim Van de Velde **System** 38 Classic

Year 2016







effortless transition

A great brand without borders, similar to the minimalistic frame systems that effortlessly transition between interior and exterior. OTIIMA Fusion is one of the greatest representations of this natural transition. Stripped to its barest and classic elements, the brand brought back much of the architectural aesthetic principles, while updating to the highest contemporary standards. This system allows a range of different relationships to be created, permitting just light or air, completely opening the spaces to the outside or creating multipurpose spaces.

While for striking and stunning visuals for curtain walls and facades, the LARGLASS frame system emerges indubitably. The rigour of flawless execution to obtain expressive quality is manifested in several projects as in the rehabilitation of the Jordão Theatre, in Portugal. There, the curtain wall system is made up of the latest fibreglass profile technology, featuring a full exterior view of glass, low thermal conductivity and a reversible system that allows the window an opening angle of 165°, giving the building a stylish and sturdy design.

OTIIMA's journey goes through continuous research for innovation, quality, and smart finishes to deliver unique minimalist window frame solutions.





Liberdade 49

Ana Costa



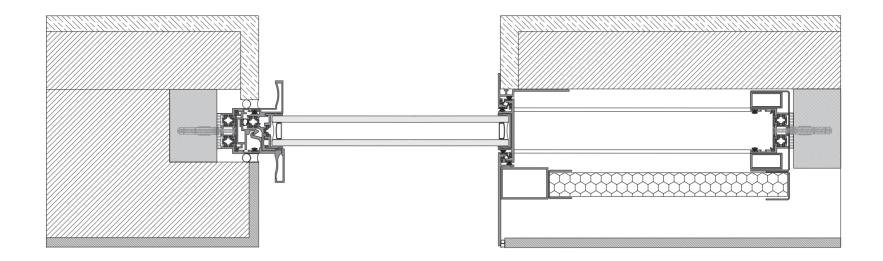


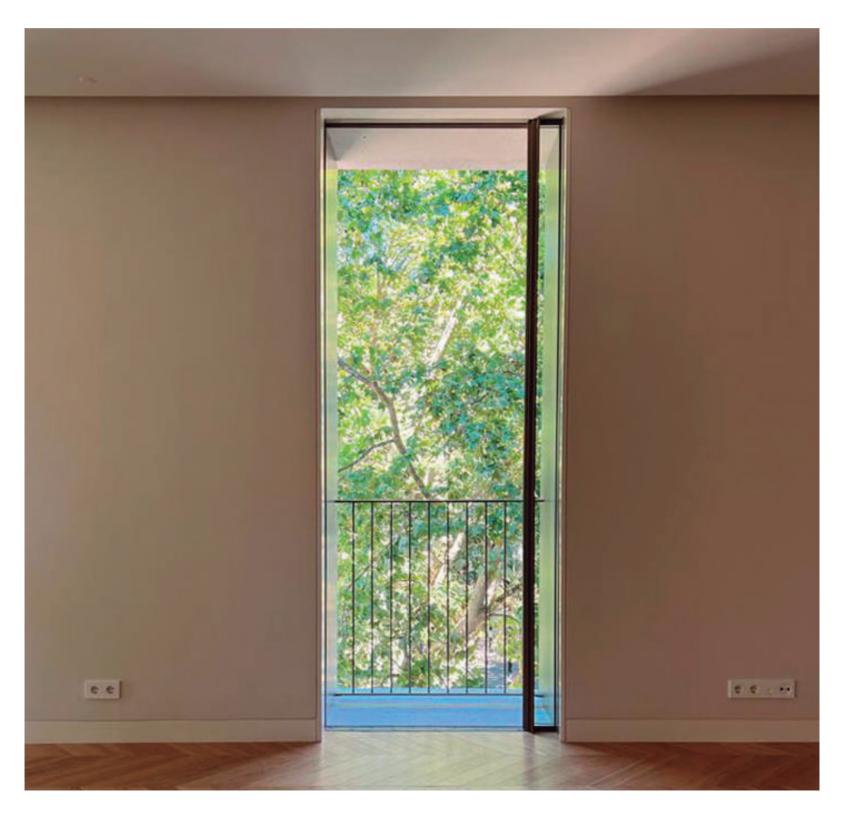
Project by OTIIMA

Photographer Ricardo Quaresma Vieira

System 38 Plus







6130 Residence

Chen + Suchart Studio



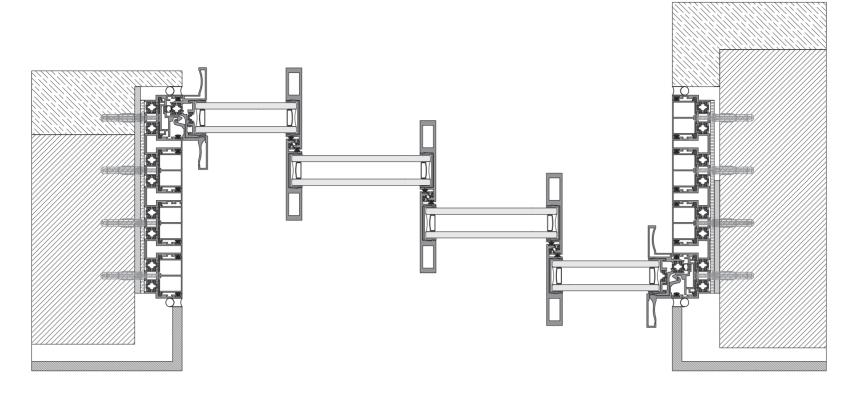


Project by OTIIMA USA

Photographer Tridi

System 38 Classic



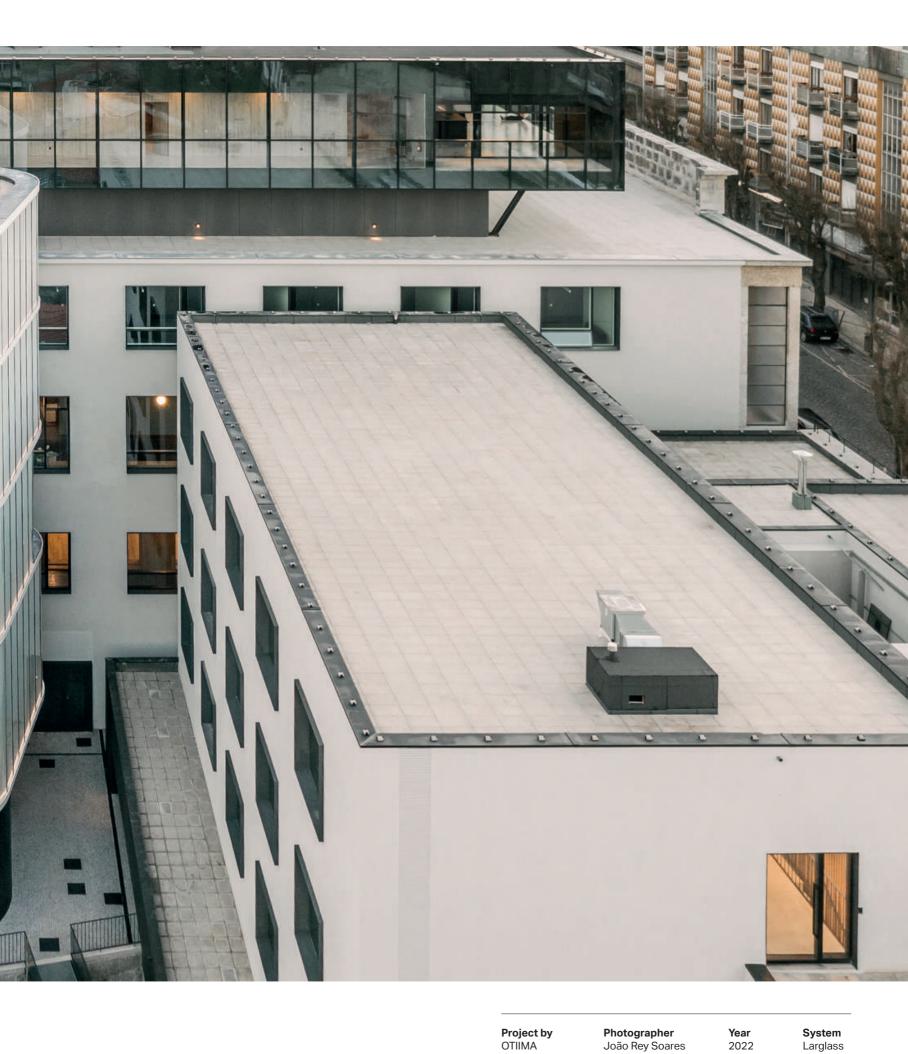




Teatro Jordão

Pitágoras Group



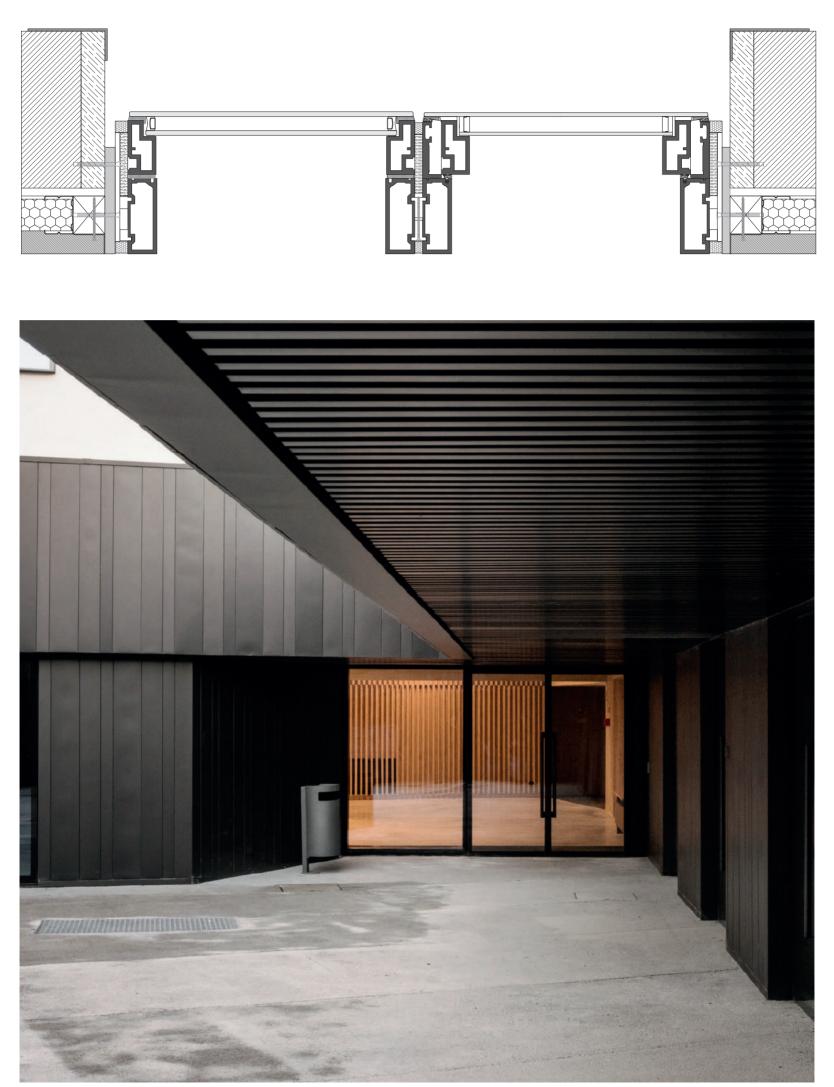


Project by OTIIMA

Photographer João Rey Soares

System Larglass





Desert Palisades

Woods + Dangaran



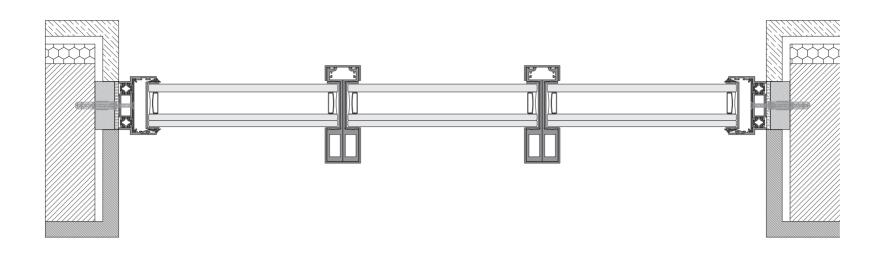


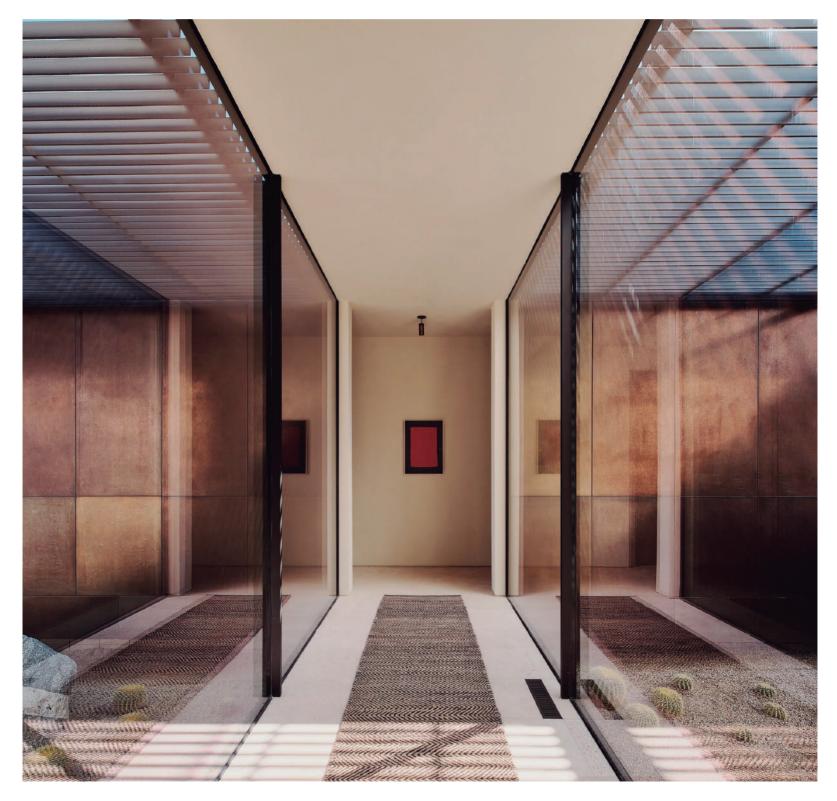
Project by OTIIMA USA

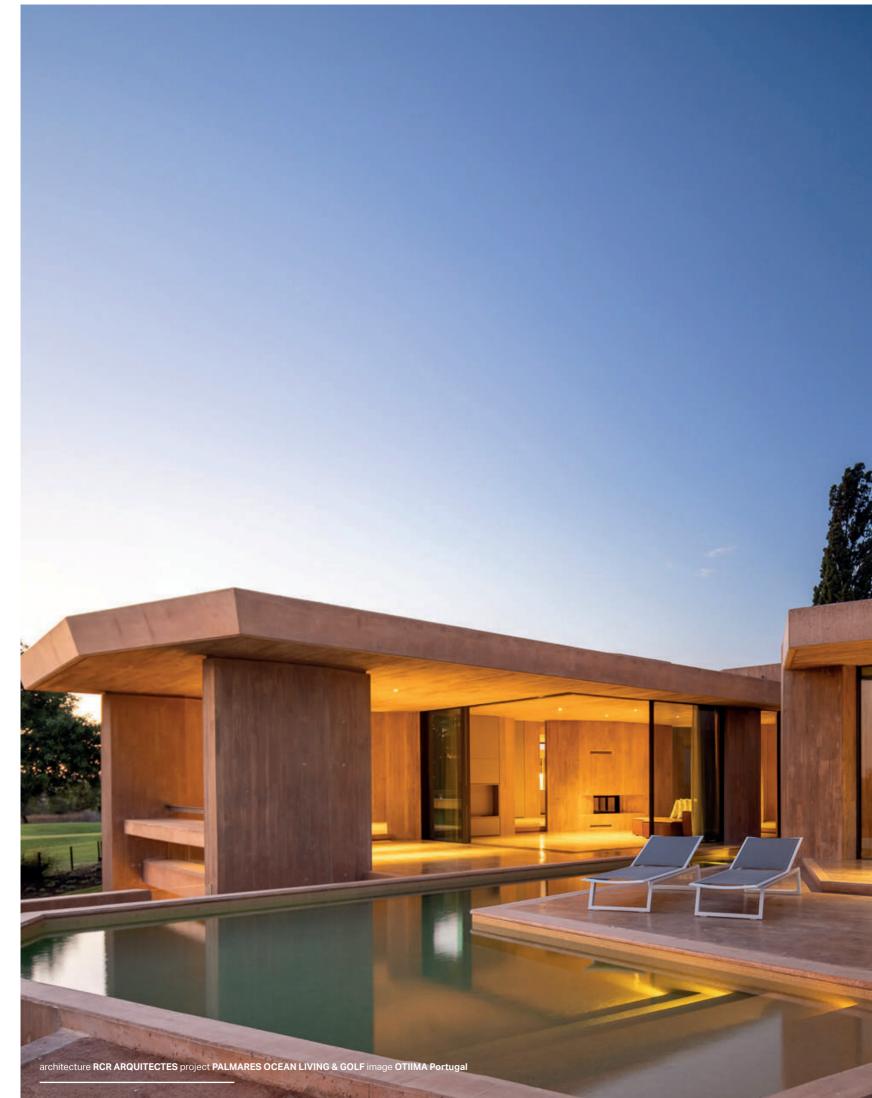
Photographer Joe Fletcher

System 54 Classic | 54 Pivot











a global reference

From opulent tower residential-office-retail complexes to marvellous cultural building rehabilitations, OTIIMA is on a constant search for exciting architectural challenges.

The purpose is to become the global reference for the ability to advance architecture and engineering discoveries.

OTIIMA PLUS system, the spotlight feature of Utopia Villa or Sabrosa House, achieves the perfect balance between the privacy of living rooms and, on the other hand, the creation of outdoor spaces that are as generous as possible, protected from outside wind and visibility. Window frame design at its visionary best engages, exhilarates, and inspires tailored solutions such as the DRAIN System, which embodies genuine innovation in window system drainage, even in extreme rainfall situations. This experience and passion that OTIIMA has for architecture and minimalist windows design are expressed through inspirational projects.

The Architect's Toolbook preserves all the features of a minimalist yet fascinating journal, presenting to the world OTIIMA'S original, unexpected, rebellious, and sophisticated frame systems.

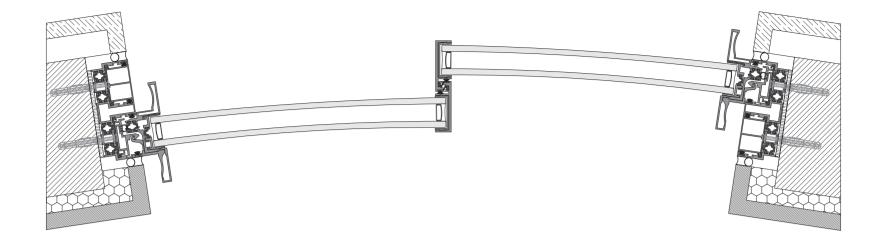






Project by OTIIMA **Photographer** Fernando Guerra **Year** 2022 System 38 Plus







Alma do Mar 19

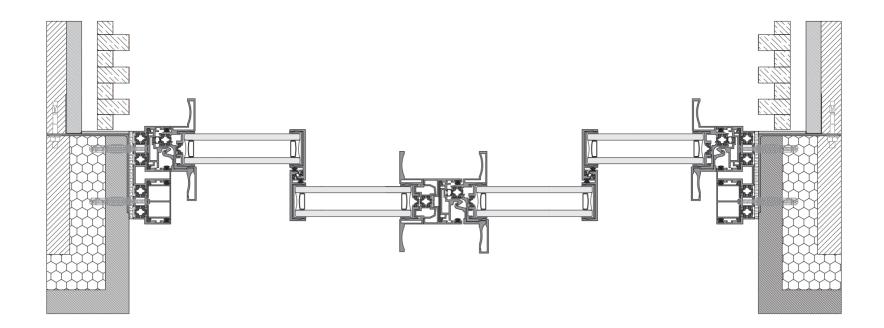
Mário Martins Atelier





Project by OTIIMA **Photographer** Fernando Guerra **Year** 2022 **System** 38 Plus







World of Wine

Broadway Malyan





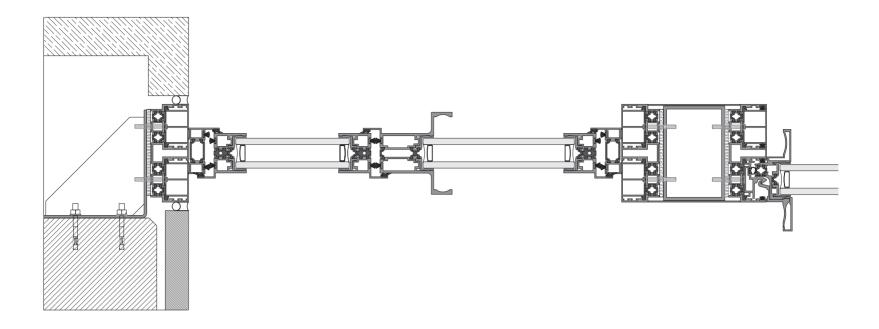
Project by OTIIMA

Photographer Bruno Lança

System 38 Pivot













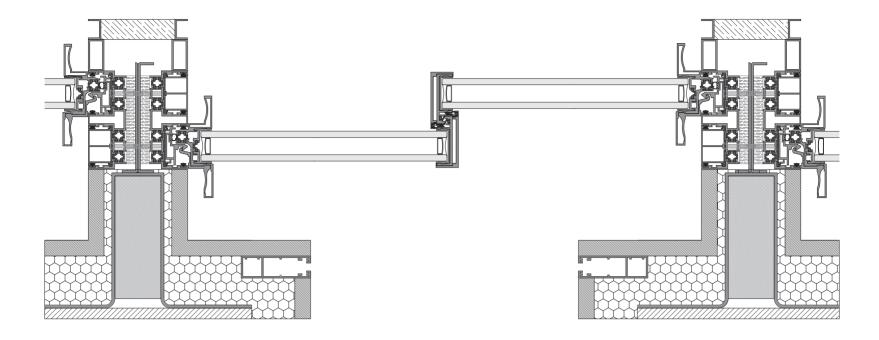


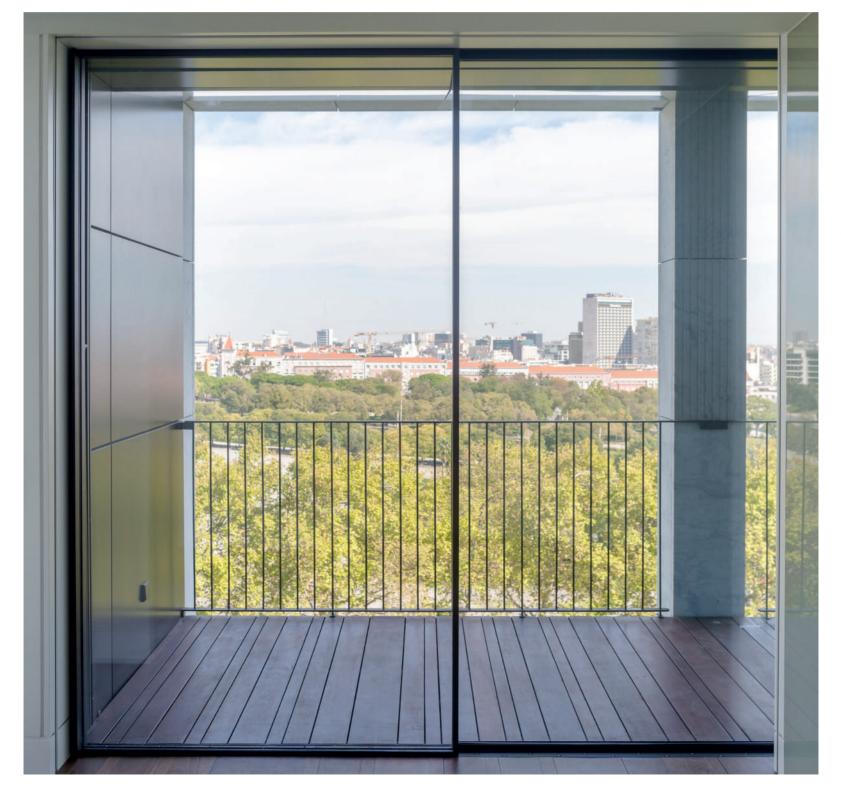
Project by OTIIMA

Photographer Bruno Lança

System 38 Plus







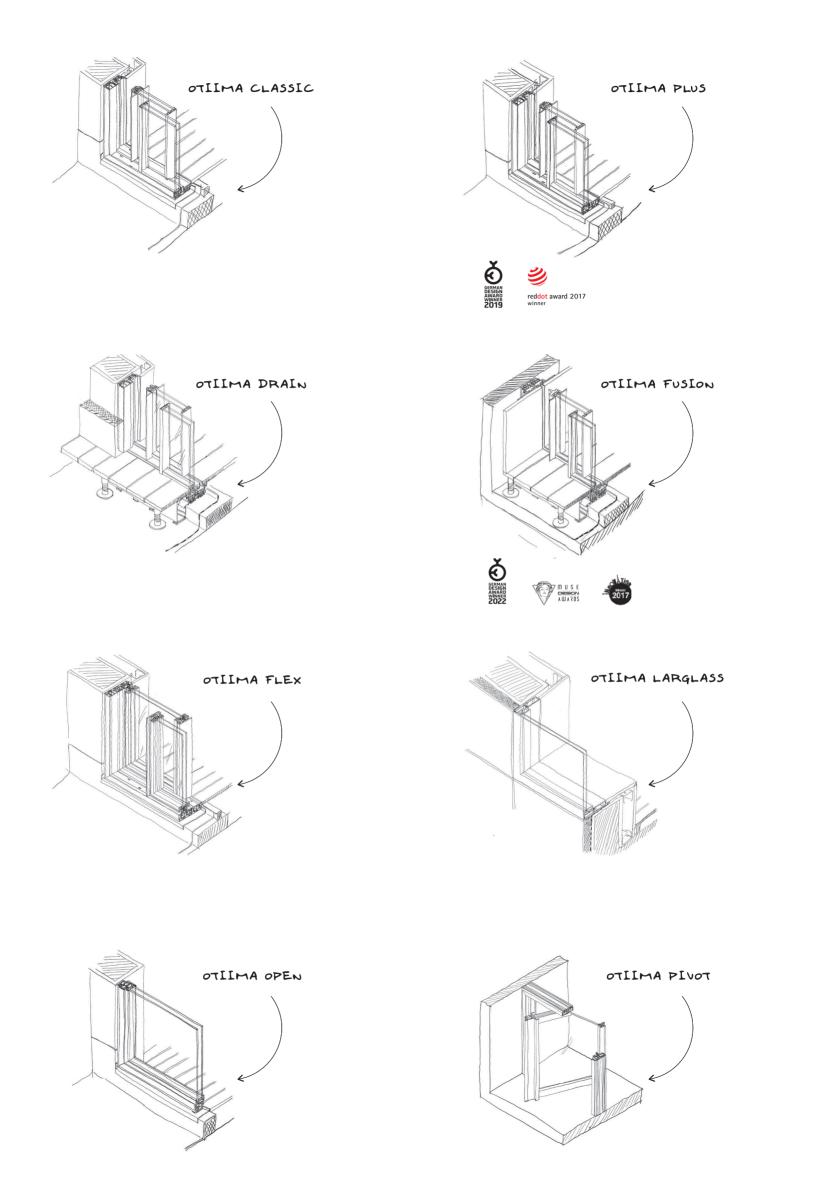
The world's most prestigious awards come to your home

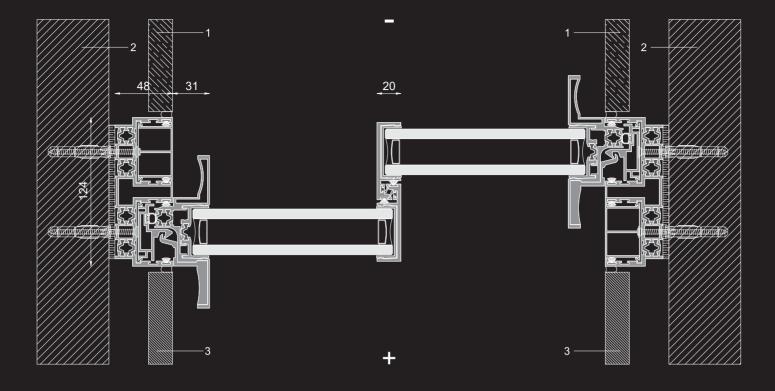
OTIIMA's products are sophisticated, unexpected, rebellious and are always on the edge of being inconceivable and more than an architectural intervention. A well-curated combination of minimalist aesthetics, savvy accessories and smart features, outlast everyday interiors or exteriors, define the personalities of spaces & deliver the extra touch of creativity and beauty that is always unexpected yet so exquisitely welcome.

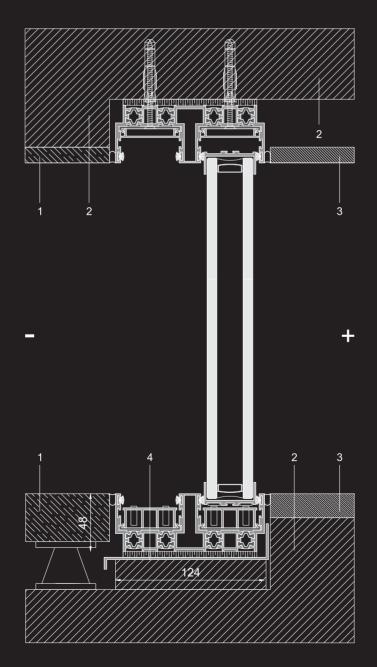
When we design, we have our customer experience in our hearts, through an in-depth and intensive creative process. The design investigation prototypes are more than one isolated idea, is a sequential learning path that carries one forward

The whole creative process is intensive, looking forward without giving up on the pursuit of innovative solutions. As a result of this philosophy, OTIIMA has been recognized by numerous awards throughout the world.

Every received award is essential and is an additional guarantee that OTIIMA will continue to innovate and bring solutions that better fit the customer's expectations.







exteriorinterior

- external finishing
 structure
 internal finishing
 waterproofing

OTIIMA CLASSIC data sheets

OTIIMA CLASSIC with a twist is the brand's early execution in presenting to the market a system that highlights both functionality and elegance in a frame system. The Classic system, with only a 20mm thick vertical interlock allows large-glazed surfaces and offers remarkable water tightness, air permeability, wind-load resistance, and thermal insulation features.

16 CLASSIC system is used for Monolithic Glass, it is suitable for interior doors or small partitions and best performs with panels with a maximum of $6m^2$ and 1 side with 3.2m.

38 CLASSIC is one of the most popular systems in the line-up of products. Both thermally versatile and structurally robust, it offers flexibility for use in both warm and moderately cold climates. Designed to accept 38mm (1-1/2") insulated glass, the 38 series can also accommodate triple-pane glass, depending on the thermal demands of the project.

54 CLASSIC is similar in appearance to OTIIMA 38 Series options, but it is specifically designed for cold climates. It is optimized for 54mm (2-1/8") triple-pane insulated glass.

The system uses toughened glass that allows superior resistance, with large surfaces. Exclusive sliding system with stainless-steel bearings, for smooth, effortless manual opening.

Available configurations include fixed windows, multi-panel and sliding windows/doors (including pockets and corner-opening configurations) guillotine (ascending and descending panels) and skylight. Door automation can be integrated into all our sliding doors.





Performance up to

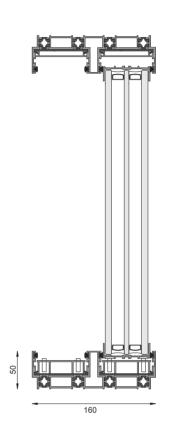
Watertightness ISO EN 12208 + ISO EN 1027		8A (450 Pa or 95Km/h)
Air Permeability	1	Class 3
SO EN 12207 + ISO EN 1026	1	(600 Pa or 110 Km/h)
Wind Resistance	I	Class C5
ISO EN 12210 + ISO EN 12211	1	(2000 Pa or 200 Km/h)
Impact Resistance	I I	Class 5
ISO EN 12600 + ISO EN 1630		(in 6 possible classes)
Acoustic Insulation	1	Rw: 38 db (up to)
ISO EN 10140 + ISO EN 717	1	
Security		RC2: (WK2)
ISO EN 1627	1	
Thermal Transmittance	1	up to
Uw Ug = 0.7		Uw 1.2 W / m² K

Calculation module 4.60 x 3.00 to Thermal transmittance ISO EN 10077-1 + ISO EN 10077-2 (up to)

Window Feature	es	• monorail •• birail	●●● trirail	* customized
horizontal sliding standard				• •• ••• *
horizontal sliding corner				• •• ••• *
horizontal sliding hidden pocket				• •• ••• *
vertical sliding standard sash				• •• •••
vertical sliding hidden retractable				• *

glass features sloped		*
glass features curved	→ ←	*

Glass Thickness Image: market in the second seco



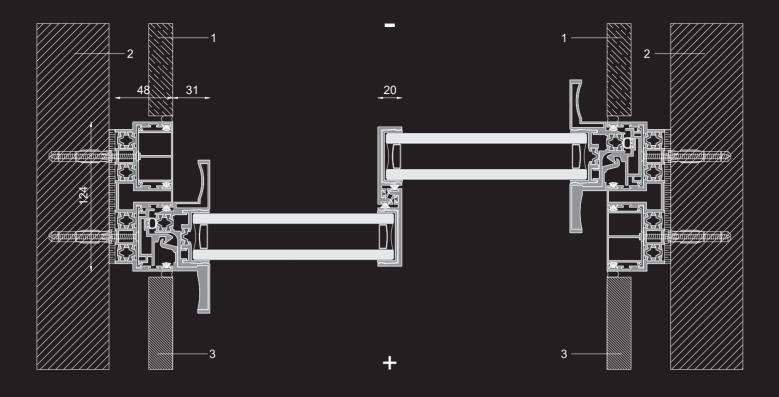
Window Customizations

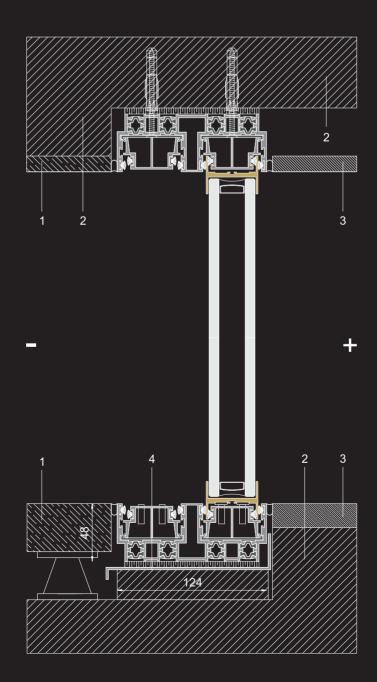
Triple Glass

C

track system visible / hidden bearings	visible
track system uneven / flush / merged bearings	uneven
flyscreen full frame	•

locking mechanisms exclusive invisible lock	•	
locking mechanisms multiple point lock	٠	
automation	٠	
exclusive anti-freeze system	•	





exterior interior

external finishing
 structure
 internal finishing
 waterproofing

OTIIMA PLUS is the revamp of the classical minimal frame systems. The collected wisdom and experience originated the most sophisticated version of a flushed frame that guarantees high performance and homogeneous aesthetics through the window.

Distinguished several times with design awards, honouring the best air and water performance in the market. Along with its highly aesthetic lines, OTIIMA PLUS stands out in air permeability and resistance to wind loads with superior stability.

OTIIMA PLUS captures all the advantages and versatility of A CLASSIC and takes it one step further. Instead of recessed tracks 10mm (3/8") below the finished floor as required for 54 CLASSIC, PLUS offers a flush head and sill track.

26 PLUS is ideal for warm climates or projects with reduced thermal requirements. This is a hybrid system with insulated glass and non-insulated monolithic aluminium frames. This system is designed to accept 26mm (1") insulated glass.

38 PLUS has all the advantages and versatility of 38 CLASSIC with a small twist in design. Instead of recessed tracks 10mm (3/8") below the finished floor as required for 38 CLASSIC, 38 PLUS offers a flush head and sill track. Like the 38 CLASSIC, the 38 PLUS is both thermally versatile and structurally robust. It offers flexibility for use in warm and moderately cold climates. It is designed to accept 38mm (1-1/2") insulated glass.

The 38 series can also accommodate triple-pane glass, depending on the thermal demands of the project.

54 PLUS is specifically designed for cold climates. It is optimized for 54mm (2-1/8") triple-pane insulated glass. The 54 Series can accommodate oversized "jumbo" double-pane glass. Multiple laminated glass options are available when noise reduction and/or impact performance is desired.

Available configurations include fixed windows, multi-panel and sliding windows/doors (including pockets and corner-opening configurations) Door automation can be integrated into all our sliding doors.



Best performance in the market



Performance up to

Thermal Transmittance (54cm) Uw Ug = 0.5	up to Uw 1.0 W / m² K
Thermal Transmittance (38cm) Uw Ug = 0.7	up to Uw 1.2 W / m² K
Security ISO EN 1627	RC2: (WK2)
Acoustic Insulation ISO EN 10140 + ISO EN 717	Rw: 42 db (up to)
Impact Resistance ISO EN 12600 + ISO EN 1630	Class 5 (in 6 possible classes)
Wind Resistance ISO EN 12210 + ISO EN 12211	Class C5 (2000 Pa or 200 Km/h)
Air Permeability ISO EN 12207 + ISO EN 1026	Class 4 (600 Pa or 110 Km/h)
Watertightness ISO EN 12208 + ISO EN 1027	E1050 (38cm) (3 classes above 9A) E1200 (54cm) (3 classes above 9A)

Calculation module 4.60 x 3.00 to Thermal transmittance ISO EN 10077-1 + ISO EN 10077-2 (up to)

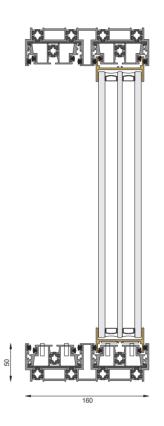
Window Feature	es	• monorail •• birail	••• trirail	* customized
horizontal sliding standard				• •• ••• *
horizontal sliding corner				• •• ••• *
horizontal sliding hidden pocket				• •• ••• *

Glass Thickness

A	 26 mm
B	 38 mm
C	 54 mm

Glass Type

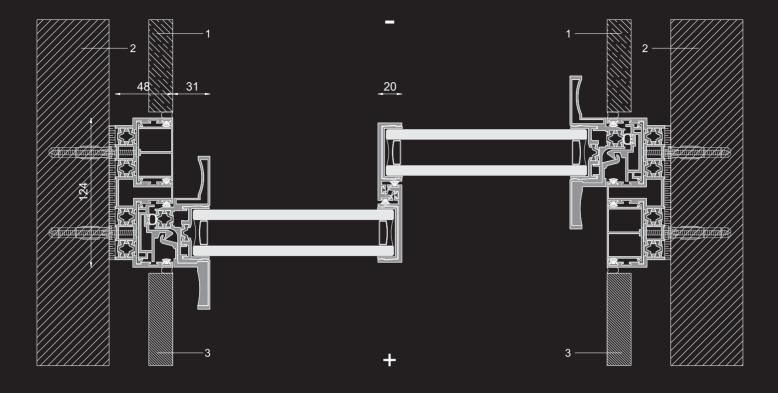
Double GlassTriple Glass

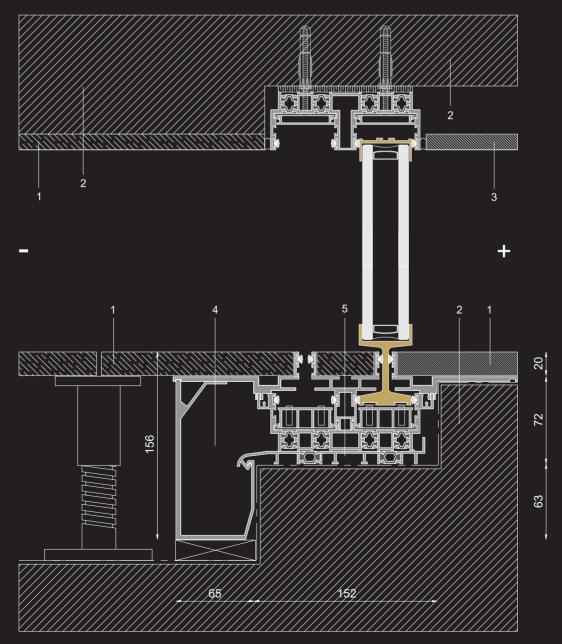


Window Customizations

track system visible / hidden bearings	visible
track system uneven / flush / merged bearings	flush
flyscreen retractable opening	•
flyscreen full frame	٠

locking mechanisms exclusive invisible lock	•	
locking mechanisms multiple point lock	•	
automation	•	
exclusive anti-freeze system	•	







- external finishing
 structure
 internal finishing
 drainage channel
 waterproofing

OTIIMA DRAIN data sheets

OTIIMA DRAIN is the system where the impeccable design of an extra slim comes together with the reference of functionality. All the versatility and flexibility offered in the CLASSIC are combined with an ingenious hidden sill design. The removable finish floor offers easy access for future maintenance. OTIIMA's hidden sill design is notable for utilizing using a single slot for each track. This peculiar combination results in an ideal floor frameless glazing solution, perfect for contemporary villas and eccentric architectural high-rise buildings. OTIIMA drain offers a system that is completely built-in on the finish materials, incorporating a drainage profile channel, able to drain large amounts of rainwater, even in extreme rainfall situations. Proudly distinguished for its exceptional results in water tightness tests, with an outstanding E1650 class (seven classes above the class 9A), according to EN 12208.

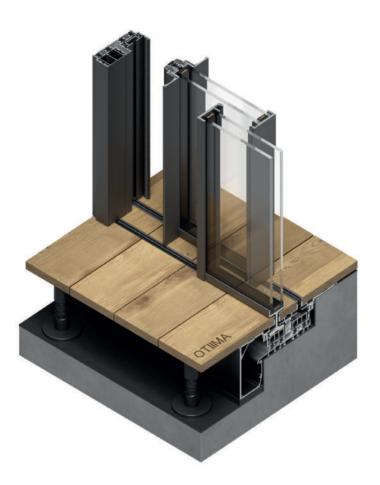
38 DRAIN is OTIIMA's hidden sill variant of the 38 Series, with an optional hidden sub-frame and trench drain. All the versatility and flexibility offered in the 38 CLASSIC are combined with an ingenious hidden sill design. Removable finish floor clips offer easy access for future maintenance. OTIIMA's hidden sill design is notable for using a single slot for each track. It is designed to accept 38mm (1-1/2") insulated glass. The 38 series can also accommodate triple-pane glass, depending on the thermal demands of the project.

54 DRAIN offers all of the versatility and flexibility of the 54 CLASSIC with an ingenious hidden sill design. Removable finish floor clips allow easy access for future maintenance. OTIIMA's hidden sill design is notable for using a single slot for each track. Some competitors' designs require two slots per panel. The 54 Series is specifically designed for cold climates by using 54mm (2-1/8") triple-pane insulated glass. The 54 Series can accommodate oversized "jumbo" double-pane glass. Multiple laminated glass options are available when noise reduction and/or impact performance is desired.

Available configurations include fixed windows, multi-panel and sliding windows/doors (including pockets and corner-opening configurations).

Door automation can be integrated into all our sliding doors.





Performance up to

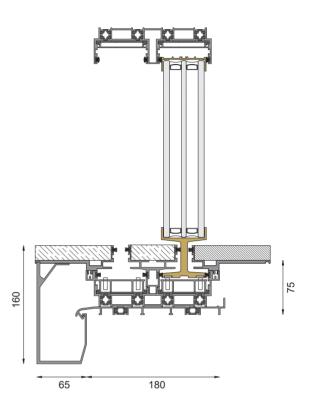
Watertightness ISO EN 12208 + ISO EN 1027	E1650 (7 classes above 9A)
Air Permeability ISO EN 12207 + ISO EN 1026	Class 4 (600 Pa or 110 Km/h)
Wind Resistance ISO EN 12210 + ISO EN 12211	Class C5 (1200 Pa or 155 Km/h)
Impact Resistance ISO EN 12600 + ISO EN 1630	Class 5 (in 6 possible classes)
Acoustic Insulation ISO EN 10140 + ISO EN 717	Rw: 38 db (up to)
Security ISO EN 1627	RC2: (WK2)
Thermal Transmittance (38cm) Uw Ug = 1.0	(ug 1.1)
Thermal Transmittance (54cm) Uw Ug = 0.5	(ug 0.9)

Calculation module 4.60 x 3.00 ISO EN 10077-1 + ISO EN 10077-2 (up to)

Window Feature	es	• monorail •• bir	ail 🔸 trirail	* customized
horizontal sliding standard				• •• ••• *
horizontal sliding corner				• •• ••• *
horizontal sliding hidden pocket				• •• ••• *
glass features curved		\rightarrow \leftarrow		*

Glass Thickness

A	38 mm
₿	54 mm



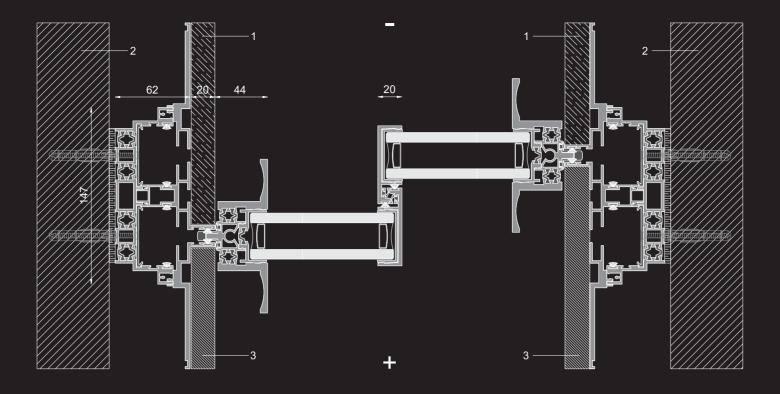
Glass Type

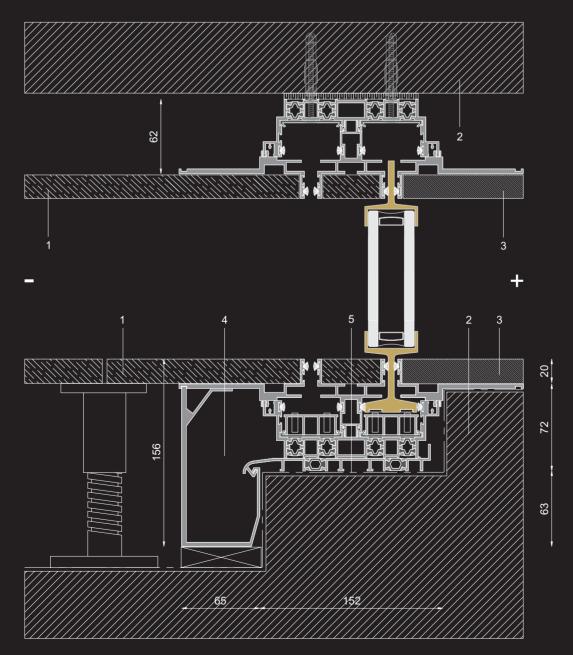
A	Double Glass
B	Triple Glass

Window Customizations

track system visible / hidden bearings	hidden
track system uneven / flush / merged bearings	merged
flyscreen retractable opening	•
flyscreen full frame	٠

locking mechanisms exclusive invisible lock	٠	
locking mechanisms multiple point lock	•	
automation	•	
exclusive anti-freeze system	٠	





exterior

- interior

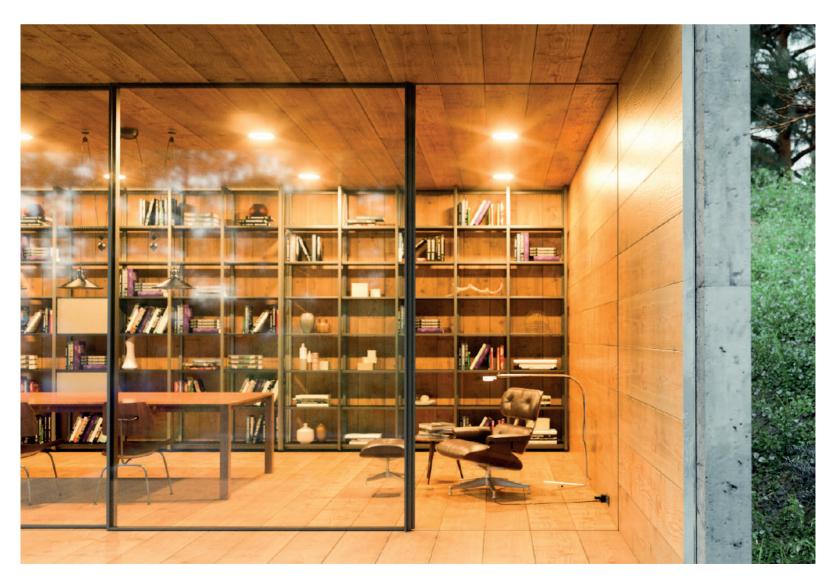
- external finishing structure internal finishing drainage channel waterproofing

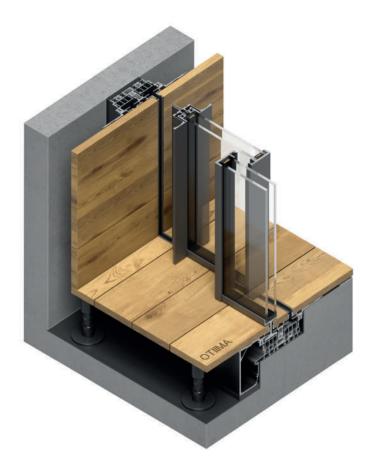
OTIIMA FUSION 1.0 is a system that is completely merged within the architectural and finishing materials, offering: hidden head, sill and jamb frames. The FUSION's exclusive design features a completely redefined, minimalistic frame system by providing the appearance of "floating" glass door panels within the architectural finishes. This system provides superior thermal and structural performance.

FUSION 1.0 incorporates a gutter capable of draining a large amount of rainwater even in extreme situations and has achieved exceptional results in leakage tests, with an e1650 class exceptional, (7 classes above class 9a) according to en 12208 + ISO en 1027.

38 FUSION 1.0 represents the latest evolution of OTIIMA's sliding door platform, offering: hidden header, sill and jamb frames. Our FUSION series demonstrates our drive to develop game-changing design capabilities for the architectural community. The FUSION's exclusive design features a completely redefined, minimalistic frame system by providing the appearance of "floating" glass door panels within the architectural finishes. Created to accept 38mm (1-1/2") insulated glass. The 38 series can also accommodate triple-pane glass, depending on the thermal demands of the project.

54 FUSION 1.0 The 54 series maintains the same sophistication and performance as the Fusion 1.0, similarly offering a hidden header, sill and jamb frames. The 54 FUSION can accommodate oversized "jumbo" double-pane glass. Multiple laminated glass options are available when noise reduction and/or impact performance is desired.





Performance up to

Watertightness ISO EN 12208 + ISO EN 1027	E1650 (7 classes above 9A)
Air Permeability ISO EN 12207 + ISO EN 1026	Class 4 (600 Pa or 110 Km/h)
Wind Resistance ISO EN 12210 + ISO EN 12211	Class C5 (2000 Pa or 200 Km/h)
Impact Resistance ISO EN 12600 + ISO EN 1630	Class 5 (in 6 possible classes)
Acoustic Insulation ISO EN 10140 + ISO EN 717	Rw: 42 db (up to)
Security ISO EN 1627	RC2: (WK2)
Thermal Transmittance (38cm) Uw Ug = 0.7	up to Uw 0.93 W / m² K
Thermal Transmittance (54cm) Uw Ug = 0.5	up to Uw 0.81 W / m² K

Calculation module 4.60 x 3.00 to Thermal transmittance ISO EN 10077-1 + ISO EN 10077-2 (up to)

Window Feature	es	• monorail •• bira	il 🐽 trirail	* customized
horizontal sliding standard				• •• ••• *
horizontal sliding corner	1			• •• ••• *
horizontal sliding hidden pocket				• ••
glass features curved		→ ←		*

Glass Thickness

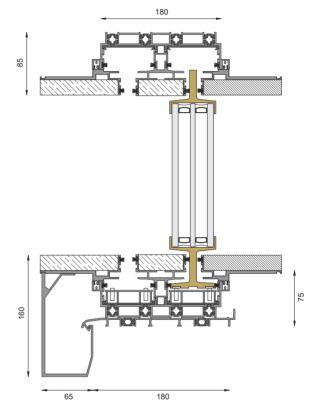
A	38 mm		
B	54 mm		

Glass Type

Double Glass

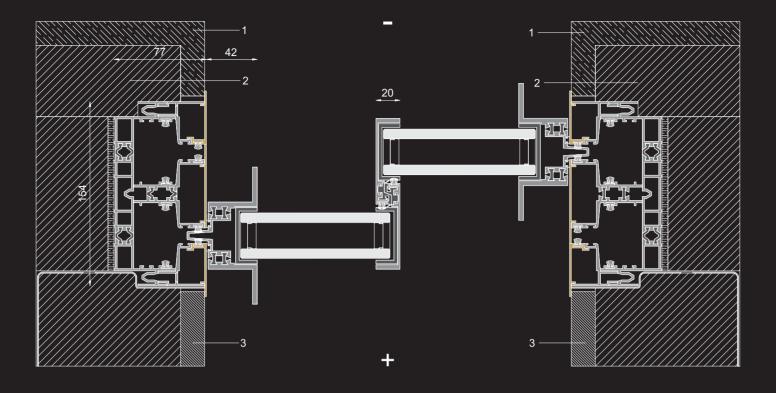
A

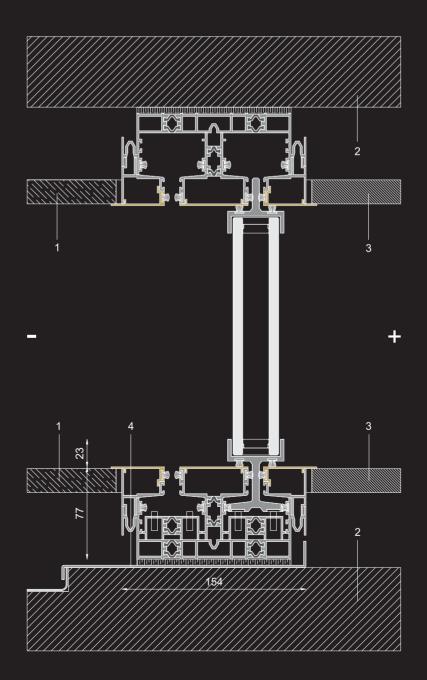
B Triple Glass



Window Customizations

track system visible / hidden bearings	hidden	locking mechanisms multiple point lock	•
track system uneven / flush / merged bearings	merged	automation	•
flyscreen full frame	•	exclusive anti-freeze system	•





exterior interior +

external finishing
 structure
 internal finishing
 waterproofing

OTIIMA FUSION 2.0 data sheets

OTIIMA FUSION 2.0 is a real example of the brand's quest for continuous perfection achieved through design research and investigation. It is the most balanced system in design, performance, and maintenance.

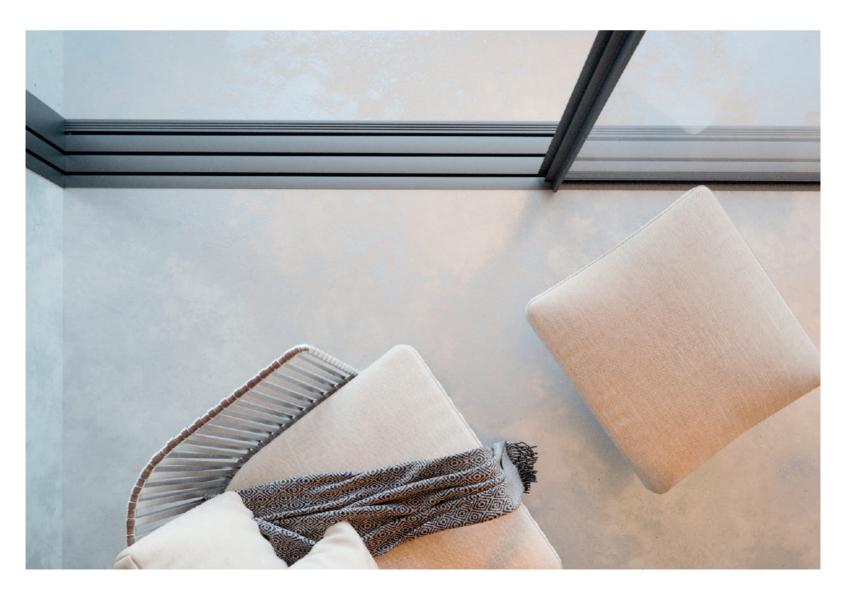
At the same time, the system features perimeter cavities below the removable finishing caps, that can be transformed into technical spaces for multiple uses, from extra mechanical fixings to thermal probes for heating, insulation, lighting, and weather sensors.

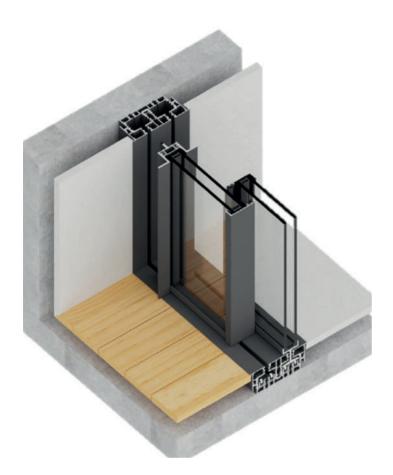
Compared with FUSION 1.0 has the better thermal capacity, uses fibreglass profiles in the system, offers faster and smoother installation and makes maintenance easier.

38 FUSION 2.0 represents the latest evolution of OTIIMA's sliding door platform, offering flushed header, sill and jamb frames. Our FUSION series demonstrates our drive to develop game-changing design capabilities for the architectural community.

The FUSION's exclusive design features a completely redefined, minimalistic frame system by providing the appearance of "floating" glass door panels within the architectural finishes. Created to accept 38mm (1- 1/2") insulated glass, the 38 series can also accommodate triple-pane glass, depending on the thermal demands of the project.

52 FUSION 2.0 is optimized for 52mm (2-1/8") insulated glass. The 52 FUSION can accommodate oversized "jumbo" double or triple pane glass. Multiple laminated glass options are available when noise reduction and/ or impact performance is desired.





Performance up to

Watertightness ISO EN 12208 + ISO EN 1027	E1650 (7 classes above 9A)
Air Permeability ISO EN 12207 + ISO EN 1026	Class 4 (600 Pa or 110 Km/h)
Wind Resistance ISO EN 12210 + ISO EN 12211	Class C5 (2000 Pa or 200 Km/h)
Impact Resistance ISO EN 12600 + ISO EN 1630	Class 5 (in 6 possible classes)
Acoustic Insulation ISO EN 10140 + ISO EN 717	Rw: 42 db (up to)
Security ISO EN 1627	RC2: (WK2)
Thermal Transmittance (38cm) Uw Ug = 0.7	up to Uw 0.93 W / m² K
Thermal Transmittance (54cm) Uw Ug = 0.5	up to Uw 0.81 W / m² K

Calculation module 4.60 x 3.00 to Thermal transmittance ISO EN 10077-1 + ISO EN 10077-2 (up to)

Window Feature	es	• monorail •• birail	••• trirail	* customized
horizontal sliding standard				• •• ••• *
horizontal sliding corner				• •• ••• *
horizontal sliding hidden pocket				• ••
glass features curved		→ <		*

Only on Fusion 2.0

		\backslash /		
swing	1		1	•
pivot			1	••

Glass Thickness

A	38 mm	
B	52 mm	

Glass Type

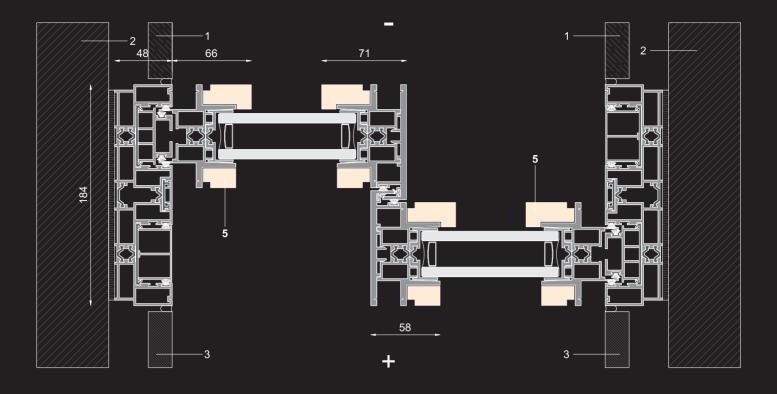
A

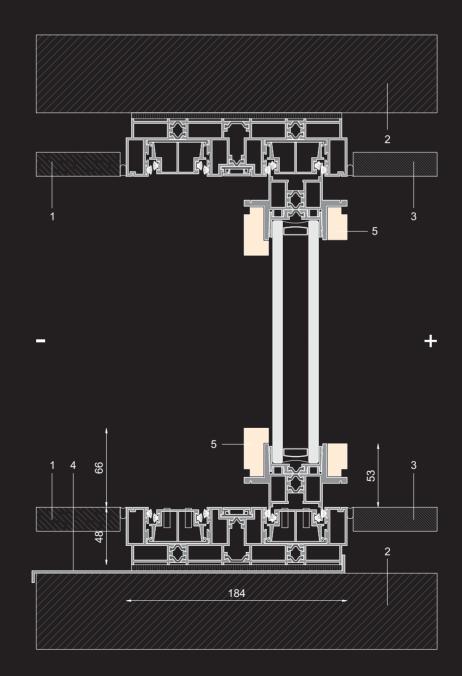
B Triple Glass

Double Glass

Window Customizations

track system visible / hidden bearings		hidden	locking mechanisms multiple point lock		٠
track system uneven / flush / merged bearings 	1 1 1 1	merged	automation	1 1 1	•
flyscreen full frame		•	exclusive anti-freeze system		•





- exterior
- interior
- external finishing
 structure
 internal finishing
 waterproofing
 custom finishing

OTIIMA FLEX system emerged utterly and meticulously as an architectural expression, implying minimal visual frames blended in the plain and simple appearance of construction without any trace of competition.

Conceived by the renowned architect Carvalho Araujo, OTIIMA FLEX gracefully allows the inclusion of handcrafted steel and wooden frames providing maximum visual language. FLEX frame optionally allows for the inclusion of a decorative sub-frame in different sizes, which can add character, enhancing the window and making it an essential element of the architectural composition.

"Sometimes we want to merge the window in the building to a minimal expression. Sometimes we want to have a visual frame, a window enhancement as a composition element. Other times we want both expressions to value a particular composition."

José Manuel Carvalho Araújo





Performance up to

Watertightness ISO EN 12208 + ISO EN 1027		E 900 (2 classes above 9A)
Air Permeability ISO EN 12207 + ISO EN 1026	1	Class 3 (600 Pa or 110 Km/h)
Wind Resistance ISO EN 12210 + ISO EN 12211	1	Class 3 (1200 Pa or 155 Km/h)
Impact Resistance ISO EN 12600 + ISO EN 1630		Class 5 (in 6 possible classes)
Acoustic Insulation ISO EN 10140 + ISO EN 717		Rw: 42 db (up to)
Security ISO EN 1627		RC2: (WK2)
Thermal Transmittance Uw Ug = 0.7		up to Uw 1.2 W/ m²K

Calculation module 4.60 x 3.00 to Thermal transmittance ISO EN 10077-1 + ISO EN 10077-2 (up to)

Window Feature	es	• monorail •• birail	••• trirail	* customized
horizontal sliding standard			1 1 1	• ••
horizontal sliding corner				• ••
horizontal sliding hidden pocket				• ••

swing casement		•
swing pivot		••

Glass Thickness

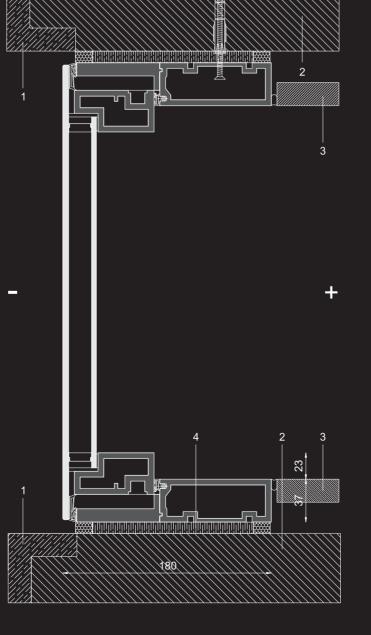


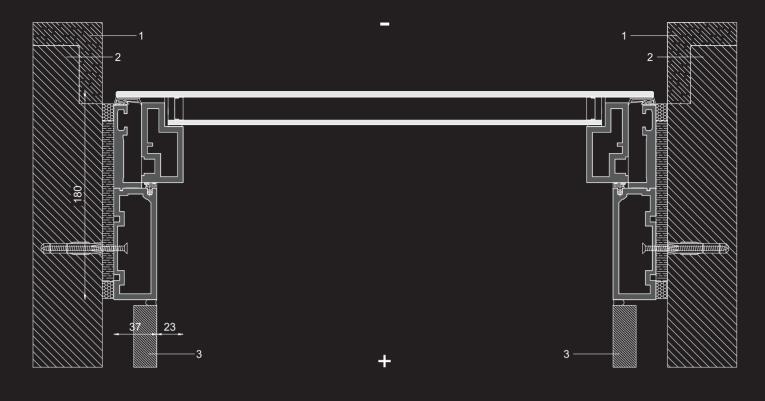
Glass Type

A Double Glass

Window Customizations

track system visible / hidden bearings	visible	locking mechanisms multiple point lock	•	
track system uneven / flush / merged bearings	flush	exclusive anti-freeze system	•	
flyscreen full frame	•			





- exterior

- external finishing
 structure
 internal finishing
 waterproofing
- +
- interior

OTIIMA LARGLASS data sheets

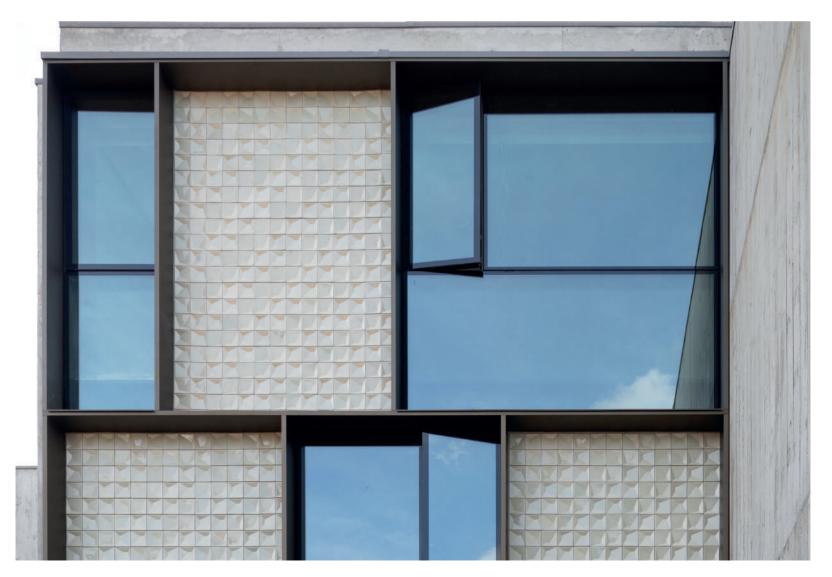
OTIIMA LARGLASS is yet an original system made of fibreglass, offering low thermal conductivity (U= 0.40 W/ m2.K) meeting easily demanding energy efficiency certifications.

Fibreglass is known as the best insulating material and only requires minimal maintenance, making it the best solution for keeping the heat inside and the cold outside the building.

OTIIMA has a constant mindset in implementing eco-friendly solutions, and the application of fibreglass positively contributes to reducing electricity consumption by up to 50% either for heating or cooling purposes.

In addition, this system eliminates the risk of moisture and condensation on the surface of the glass or the profiles. Its structural resistance is highly capable, which allows using slim profiles even in large-glazed panes. It is highly resistant to corrosion and rotting, even in more aggressive environments.

Available in a double or triple glass.

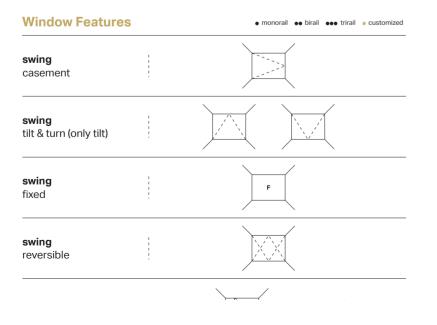




Performance up to

Watertightness ISO EN 12208 + ISO EN 1027	9A
Air Permeability ISO EN 12207 + ISO EN 1026	Class 4 (600 Pa or 110 Km/h)
Wind Resistance ISO EN 12210 + ISO EN 12211	B5 (1200 Pa or 155 Km/h)
Impact Resistance ISO EN 12600 + ISO EN 1630	Class 5 (in 6 possible classes)
Acoustic Insulation ISO EN 10140 + ISO EN 717	Rw: 42 db (up to)
Security ISO EN 1627	RC2: (WK2)
Thermal Transmittance Uw Ug = 0.7	up to Uw 0.9 W/ m²K

Calculation module 2.00 x 1.20 to Thermal transmittance ISO EN 10077-1 + ISO EN 10077-2 (up to)



OTIIMA LARGLASS data sheets

Glass Thickness

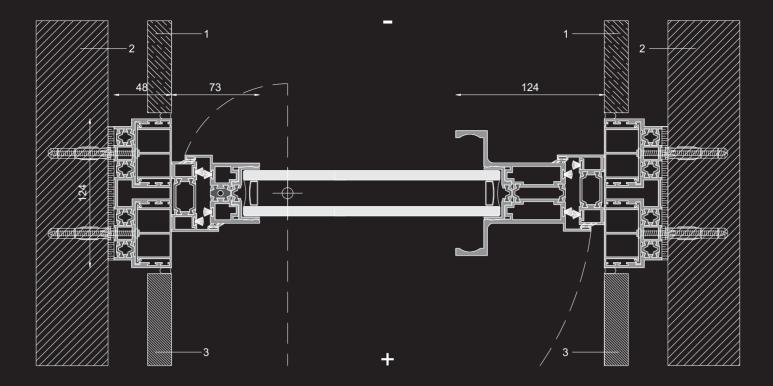
A 28 mm	
B 45 mm	

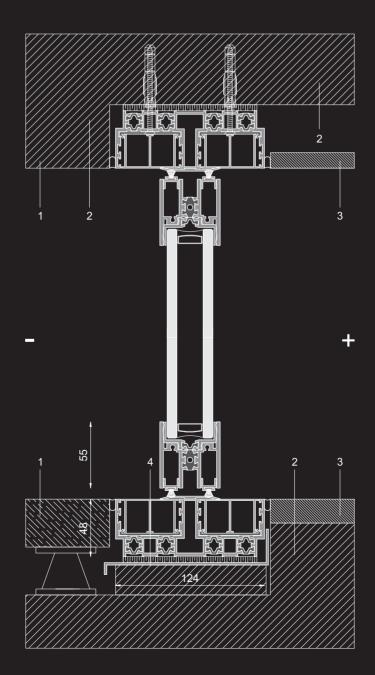
Glass Type

A	Double Glass
₿	Triple Glass

Window Customizations

locking mechanisms multiple point lock	•
automation	•

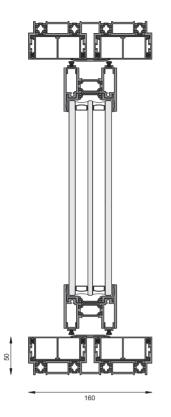




exteriorinterior

external finishing
 structure
 internal finishing
 waterproofing

OTIIMA PIVOT data sheets

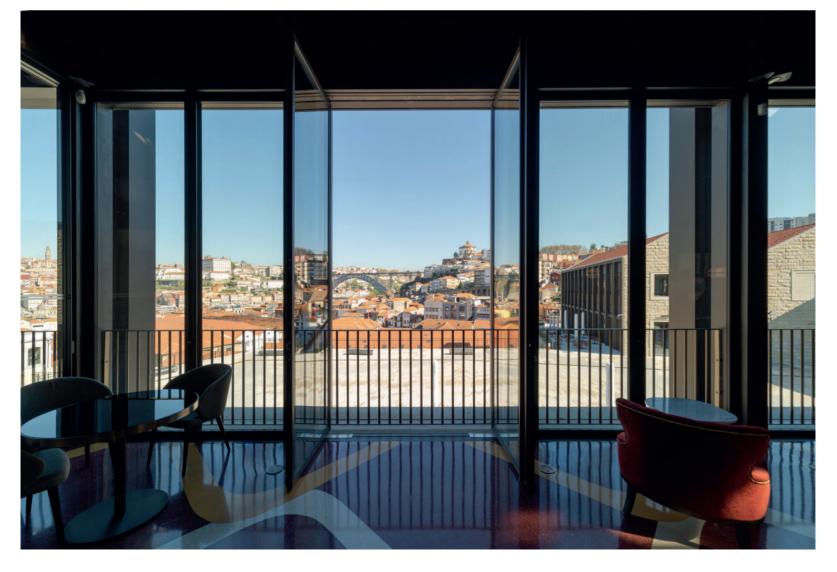


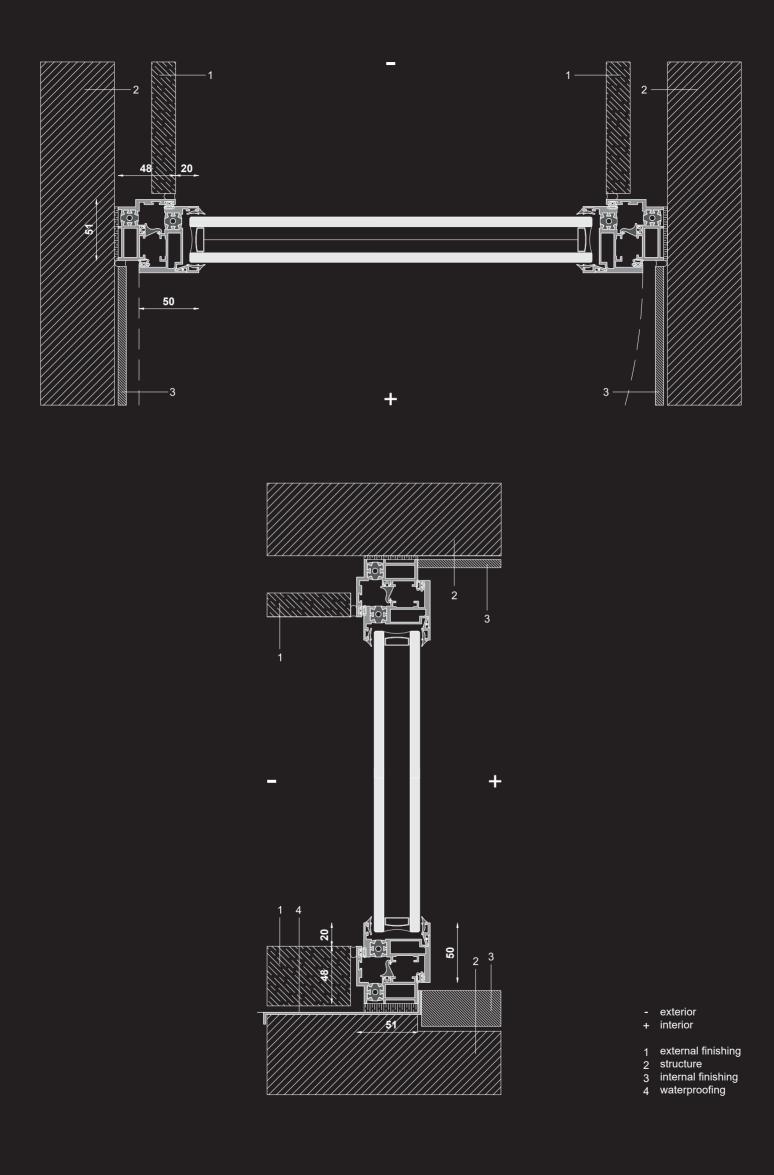
OTIIMA PIVOT system enhances stunning looks and contemporary style in every space. OTIIMA PIVOT offers clients a broader range of operable door types, often used as an entry door or in a wall of doors. Multiple laminated glass options are available when noise reduction and/or impact performance is desired.

38 PIVOT uses 38mm (1-1/2") insulated glass and can accommodate oversized "jumbo" double-pane glass.

54 PIVOT uses 54mm (2-1/8") insulated glass and can accommodate oversized "jumbo" double or triple-pane glass.

Available configurations include single and multi-panel, inward/outward opening and manually operated or automated pivot doors. Each door type can be mulled to fixed windows or window walls for facade applications.



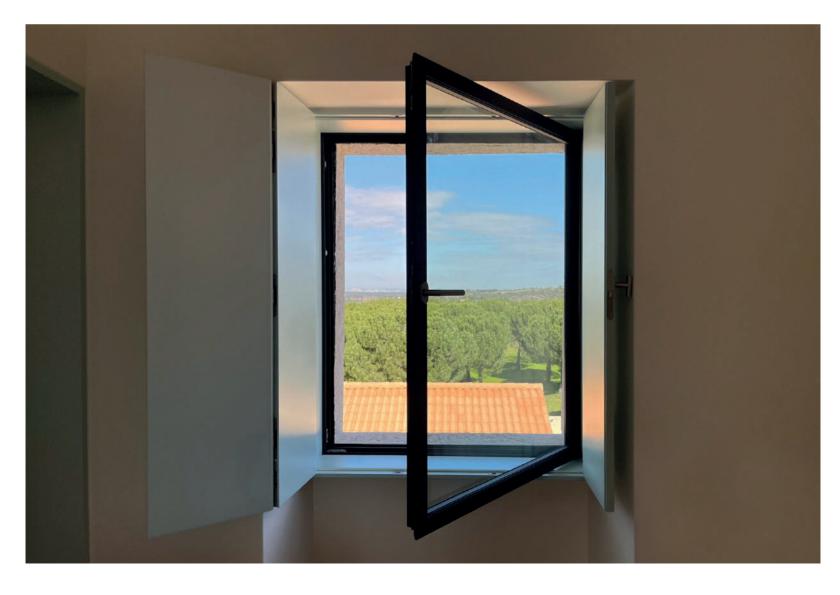


OTIIMA OPEN system is offered in both inward and outward opening configurations in the perimeter with the same size as the sliding series profiles, allowing the extension of living spaces. Rim profiles in OTIIMA OPEN are reinforced with binding polyamides for improved thermal insulation performance and toughened double and triple glass allows the best thermal performance.

It is designed to offer multi-point locking for increased security. Concealed motorization is available upon request.

38 OPEN is OTIIMA's operable window system offered in both inward and outward opening configurations. It is designed to accept 38mm (1-1/2") insulated glass for moderate climates and offers multi-point locking for increased security. Concealed motorization is available upon request.

54 OPEN is OTIIMA's cold climate operable window system, offered in both inward and outward opening configurations. It is designed to accept triple-pane glass and offers multi-point locking for increased security. Concealed motorization is available upon request.





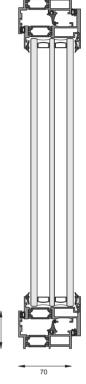
Performance up to

Watertightness	1	E1200
ISO EN 12208 + ISO EN 1027	1	(4 classes above 9A)
Air Permeability	1	Class 4
ISO EN 12207 + ISO EN 1026		(600 Pa or 110 Km/h)
Wind Resistance	1	Class B5
ISO EN 12210 + ISO EN 12211	1	(2000 Pa or 200 Km/h)
Impact Resistance	1	Class 5
ISO EN 12600 + ISO EN 1630	1	(in 6 possible classes)
Acoustic Insulation	1	Rw: 40 db (up to)
ISO EN 10140 + ISO EN 717		
Security	1	RC2: (WK2)
ISO EN 1627		
Thermal Transmittance	1	up to
Uw Ug = 0.7		Uw 1.3 W/ m ² K

Calculation module 1.23 x 1.48 to Thermal transmittance ISO EN 10077-1 + ISO EN 10077-2 (up to)

Window Features		monorail •• birail ••• trirail * customized
fixed standard	1	
swing casement		
swing tilt & turn		

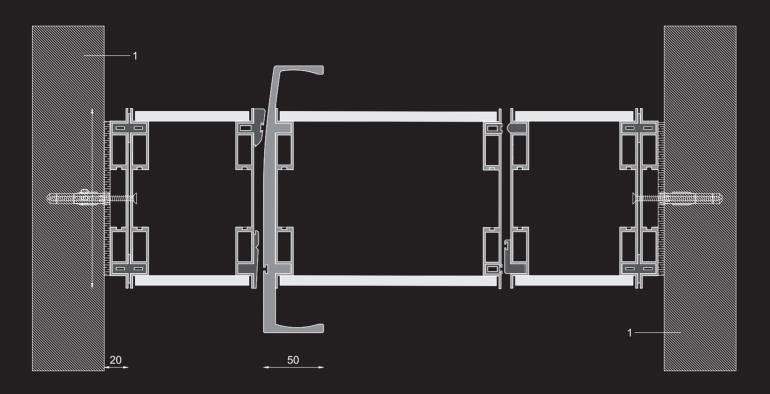
Glass Thickness 38 mm 3 f4 mm Glass Type Ouble Glass

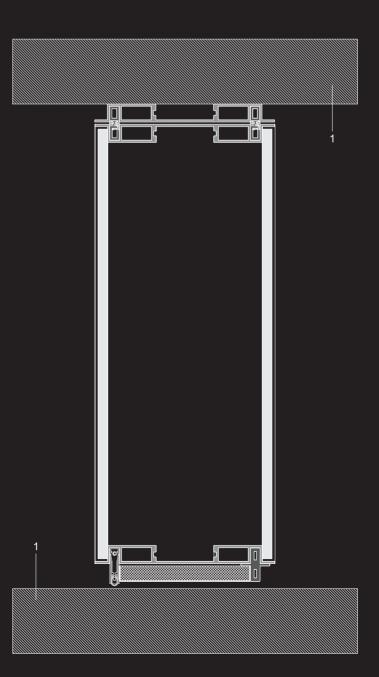


Window Customizations

B Triple Glass

locking mechanisms multiple point lock	٠	
automation	•	
exclusive anti-freeze system	•	





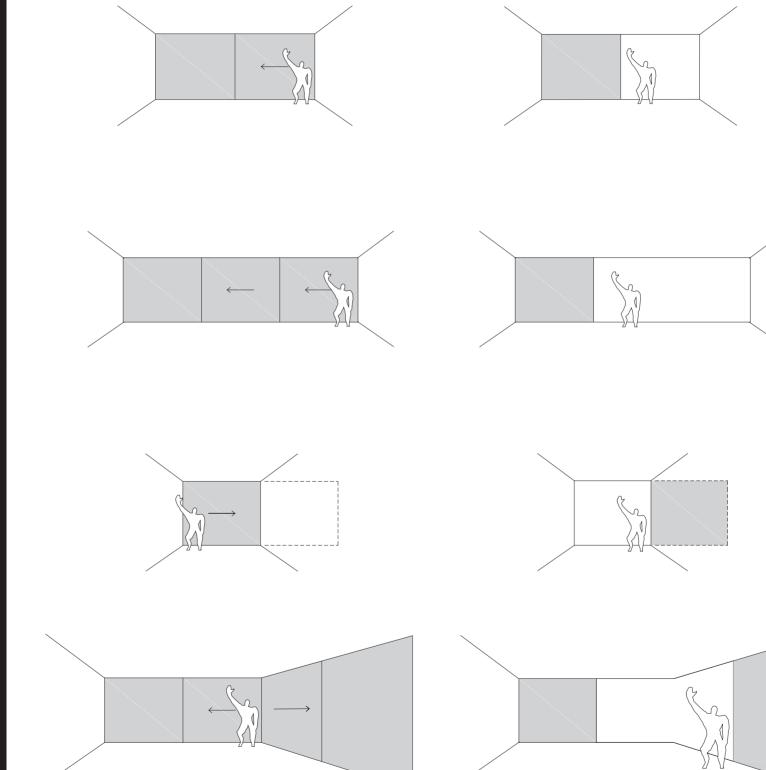
OTIIMA (IN)DOOR data sheets

OTIIMA (IN)DOOR is yet another design innovation that emerged with the purpose to resolve an architectural lack when it comes to aesthetically compartmentalise interior spaces.

OTIIMA (IN)DOOR system will be composed of extruded aluminium profiles, covered by two surfaces of laminated glass which is ideal for interior partitions. Designed to allow the greatest variability of modules, this project concept aims to offer a range of possibilities for commercial spaces, offices or laboratories and is versatile in terms of acoustics and design. This innovation has several important characteristics such as extremely light opening pivot panels and is very easy to handle; the gap interior of the panels can be customized with led lighting (WRGB or monochrome), blackouts or blinds; it is so flexible allowing the combination of fixed panels with opening pivot panels. It can be customized through the combination of transparent glass, translucent and/or coloured glass.

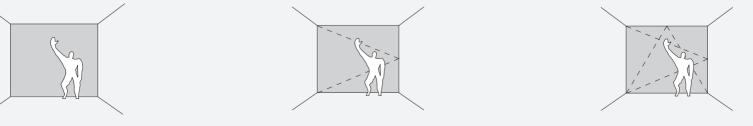
Another feature of **OTIIMA (IN)DOOR** is the possibility of coating with other materials. The finishing of the perimeter profiles can be customized and easily adaptable to any architectural context. In addition, it is a product of easy maintenance and maximum comfort. This innovative solution allows you to work vertically (as a division of spaces), as well as horizontally, coating ceilings and thus giving continuity to the material.

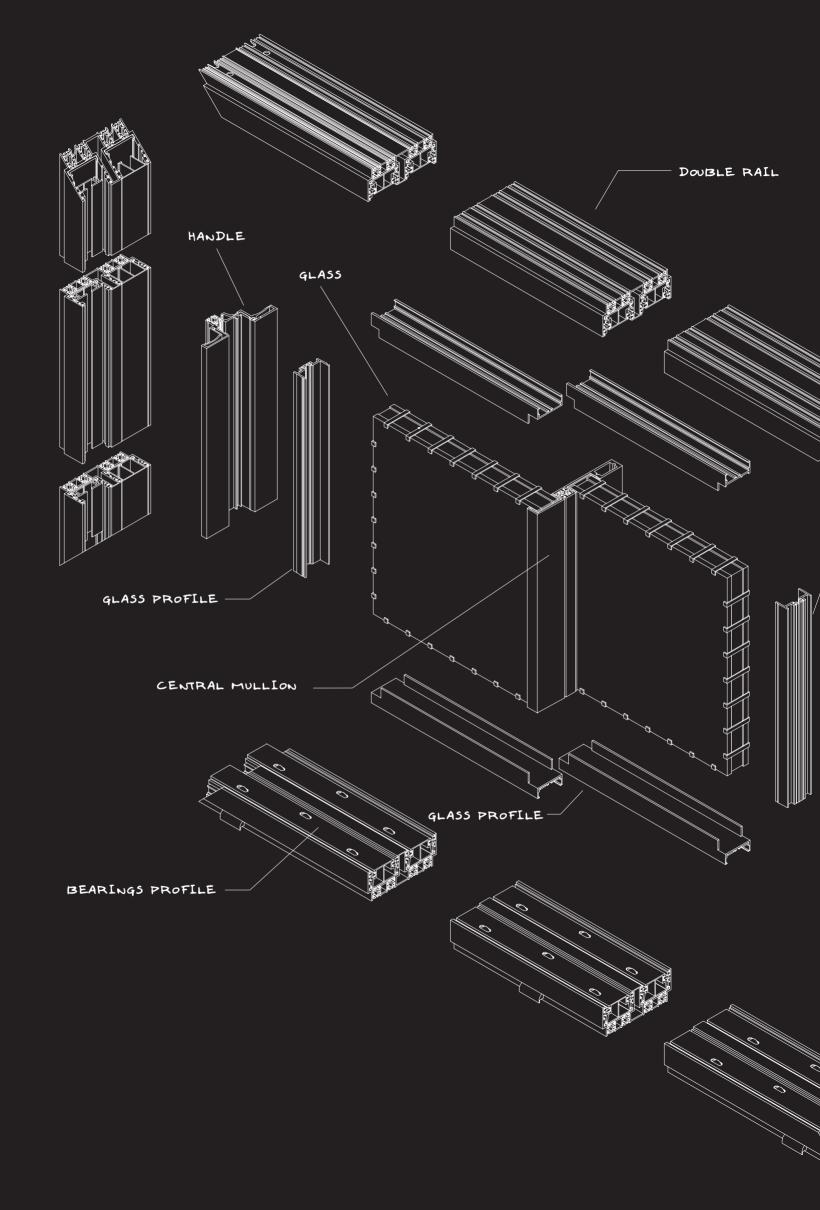


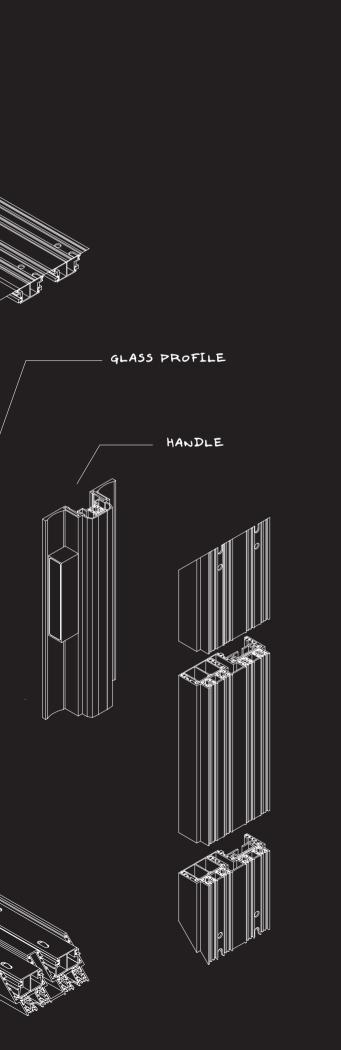


OTIIMA OPENING TYPES data sheets

R R 2 $\overline{\langle}$ ↓ Î (2 ୯ $\langle \rangle$ N (S $\langle \rangle \rangle$ Ĩ I ,n S FIXED SWING (OPEN) TILT & TURN





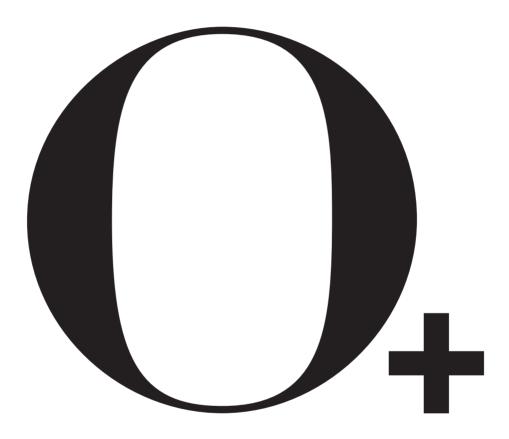


The anatomy of a minimalist window

Minimalism, the core trait of OTIIMA, is the timeless design that consistently resurges from place to place. Neat, functional interiors, and contemporary exteriors, focused only on what is essential, or absolutely necessary and pleasing to the eye. The mantra "Less is More" defines not only the aesthetic aspect of the products but is also in fact the continuous quest for the best materials, combining quality with the latest technology.

99

If you fall in love with minimal design **blame us**



What started as a challenge for innovation, became the catalyst for everyone who became part of this journey and the mission to place a new window in every space and every building. OTIIMA evolved in the hands of skilled metalworkers, designers and engineers and transformed the company from a locksmith that manufactured aluminium profiles to the inventor of minimalist and cutting-edge frame systems.

The journey continued with ingenious motorization and automation concepts that enable OTIIMA to have the sleekest synchronized minimalist window in the world. Another trait that distinguishes OTIIMA is the audacity to dive into uncertainty and excel, performing with precision under the motto "You weren't there, but we were". This fearless DNA built by the combination of art, construction and metal finds expression not only in the creation of outstanding frame systems but also in an unparalleled customisation capacity.



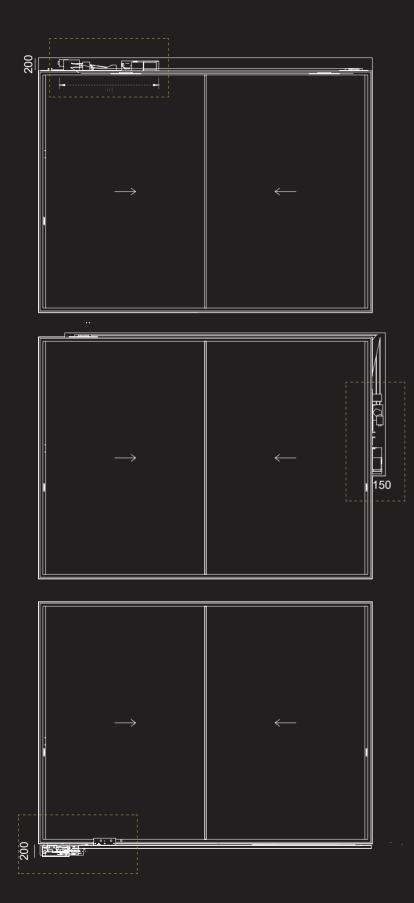
Motorized Sliding System



Project by OTIIMA **Photographer** OTIIMA Year

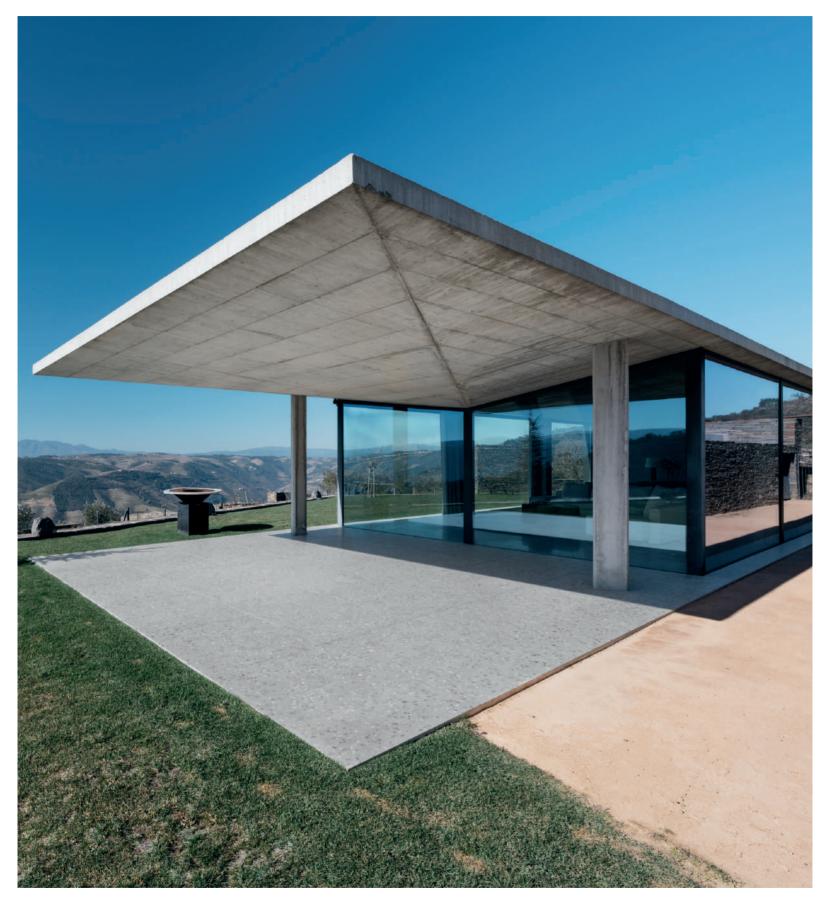
2018

System 38 Fusion 1.0



The **OTIIMA Automatic Sliding Windows** is conceived as the representation of an effortless system where its main priority is comfort, safety and utility. The stainless steel frame of the motor reflects the highest quality standards and the attention that OTIIMA gives to each detail. The self-lubricating polymer compound is maintenance-free, ensures longevity and avoids the probability of firsts, giving the spotlight to the smoothness of the window sliding. OTIIMA manufacturing ability to offer a variety of designs for the placement of the motor while maintaining the same high performance.

Motorized Guillotine System



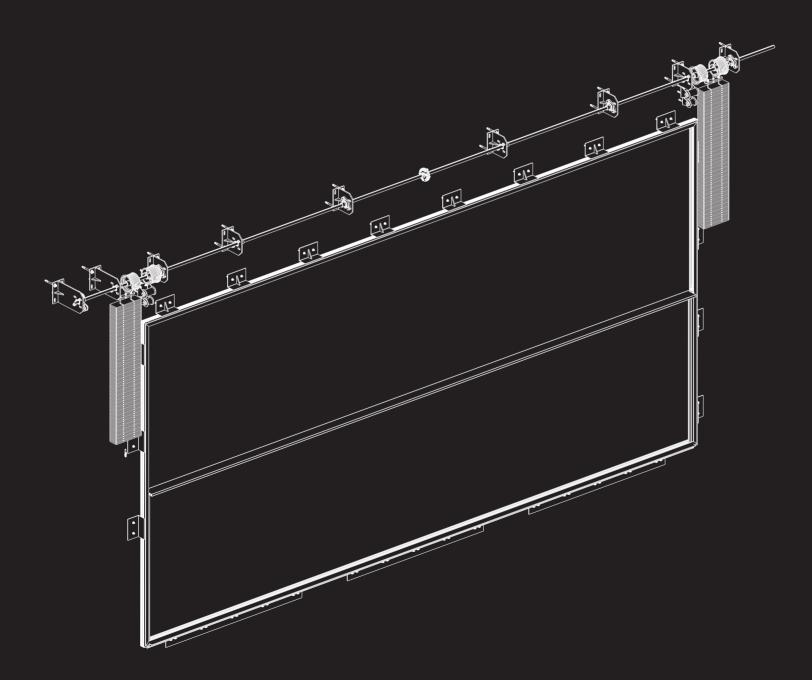
Photographer João Rey Soares Year

2022

System 38 Classic

With a sleek design **OTIIMA motorized guillotine system**, provide limitless custom-made versions with high-precision counterweight operation. The refinement lays in the homogenous design and configuration of the structural system with the hidden counterweights and pulleys, balancing the mass of operable panels.

A flawless movement to the eye, capturing and preserving the minimalist character of OTIIMA, while in the backscene thousands of "theatre technicians" help to create the fantastic effect for an exquisite live performance of ascending or descending panels.

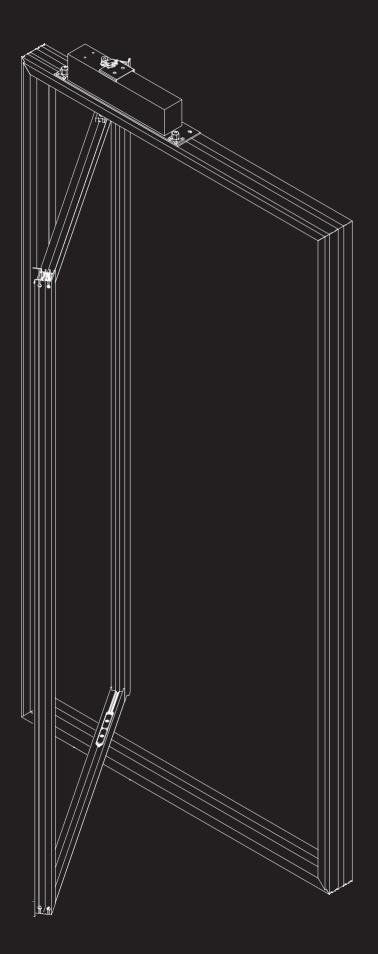


Motorized Pivot System



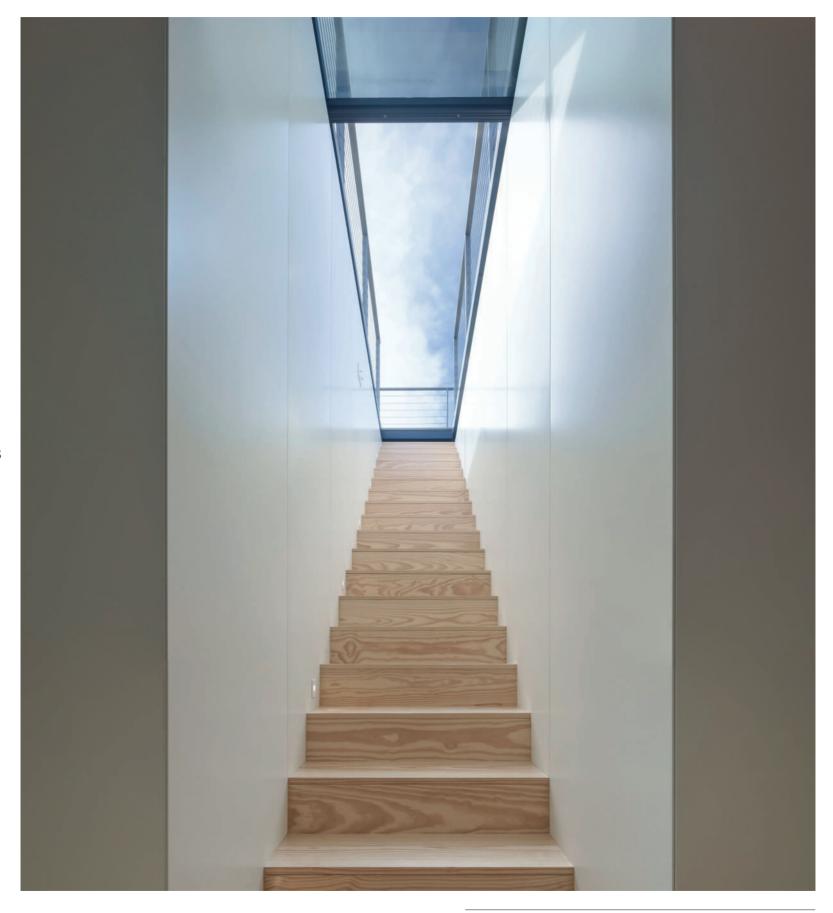
Project by	Photographer	Year
OTIIMA	João Ferrand	2021

106



OTIIMA motorised pivot systems enhance stunning looks and contemporary style in every space. The imperceptible motors are integrated into the pivot hinge, on the top and bottom side of the door allowing it to rotate on the vertical axis effortlessly. In terms of functionality and aesthetics, there is an absolute combination: the hands-free pivot door is suitable for countless types of placements for both interior, and exterior situations, and there are no limitations. This system adds extra attention to safety thanks to the self-closing function, in an elegant, smooth motion to its closed position after being opened.

Motorized Sliding Skylights

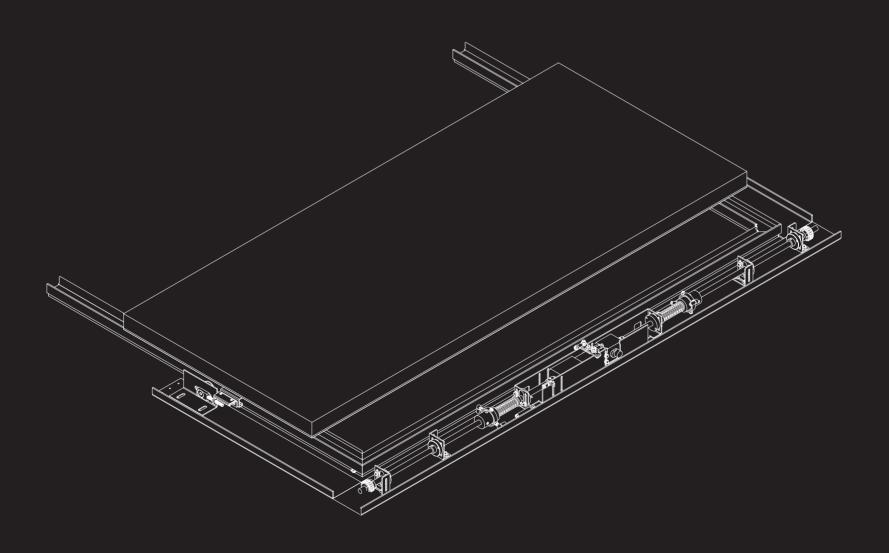


Project by OTIIMA **Photographer** Fernando Guerra **System** 38 Skylight

Year

2020

OTIIMA motorized sliding skylights are designed to allow the entrance of daylight while adding a little extra in terms of design and aesthetics. The structural glazing allows the expansion of the scenery and the application of big panels, with high thermal, wind and air performance. The customisation capacity of OTIIMA provides customers with a unique and personalised version of our products, as in the "Edificio Nautico", where the main role was not only in allowing the entry of light but also enhancing the transition from the ground floor to an over a compartment, as when ascending the primary deck of a ship.



OTIIMA Locking System Invisible Side Lock



Project by OTIIMA

Photographer João Ferrand

Year

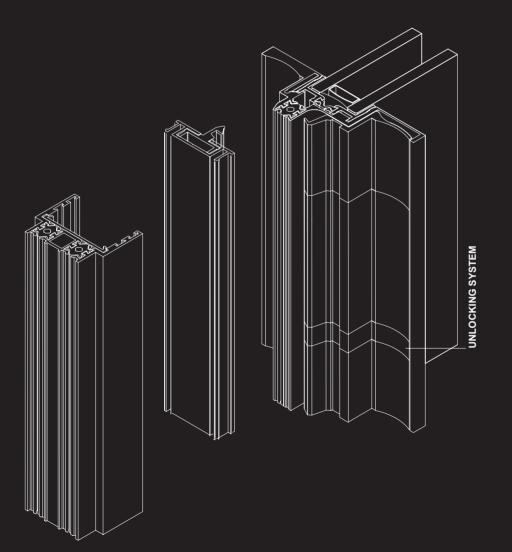
2021

System Hidden Lock

OTIIMA's systems are sophisticated, unexpected, rebellious and are always on the edge of being inconceivable and more than an architectural intervention. A well-curated combination of minimalist aesthetics, savvy accessories, and smart features, outlast everyday interiors or exteriors. In our pursuit of perfection, customers' safety and comfort are two main pillars. This is our main motivation to design windows that can be customized with two different types of locks, both equipped with highly efficient security solutions.

The **INVISIBLE SIDE LOCK** applied on the handle with a subtle design that makes it almost imperceptible, is another patented system of OTIIMA. RC2 tested for optimal security and access control.

An electromagnetic lock can be implemented in OTIIMA systems, and the new generation of OTIIMA solutions allows the perfect integration of alarm cells.



INVISIBLE LOCK

OTIIMA Locking System Invisible Central Lock



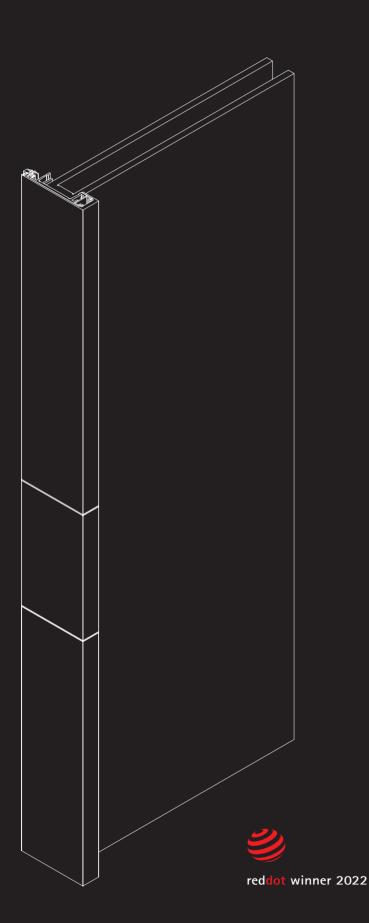
Photographer OTIIMA

Year

2022

System Hidden Lock

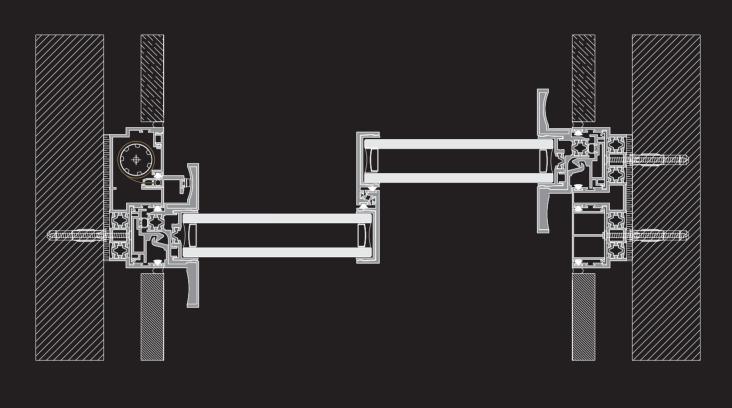
The **INVISIBLE CENTRAL LOCK** has the same minimalist and subtle character as the invisible lock but it is applied on the central frame, a fully concealed mechanism with a multi-point lock system.

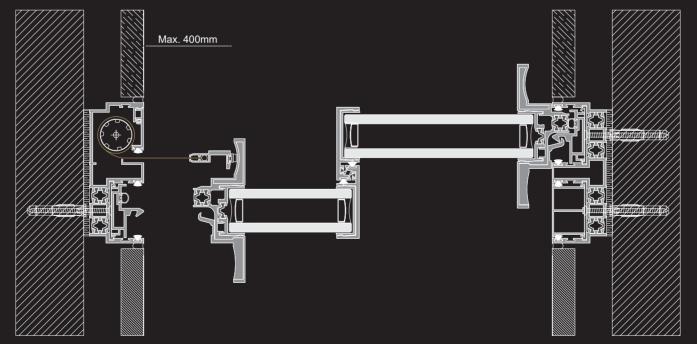


Retractable Flyscreen System

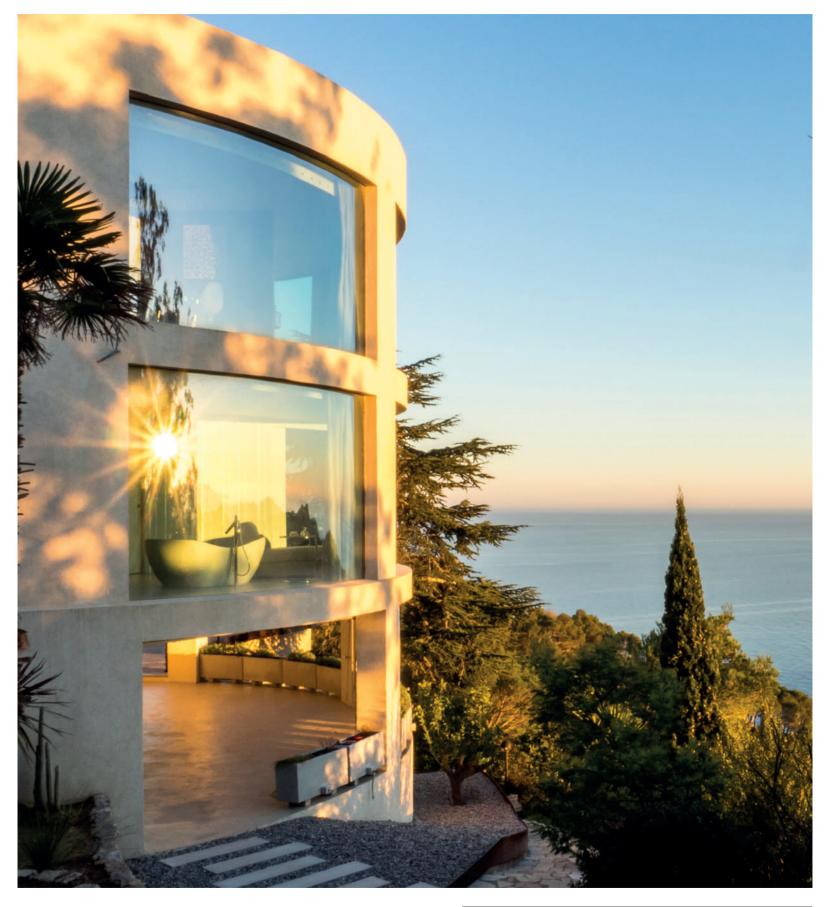


OTIIMA flyscreen system provides complete freedom to enjoy relaxation keeping the windows open for full visibility or air flow, protecting you from external parasites. The OTIIMA flyscreen is a fully integrated system applied to the OTIIMA PLUS System that can be used with a maximum height of 3200mm and a maximum opening of 500 mm. The motorized screen is smoothly operated with remote control and is easy to clean and maintain. It can also be fixed using a retractable vertical bearing, hidden in the window cover, for a maximum opening size of 40cm.



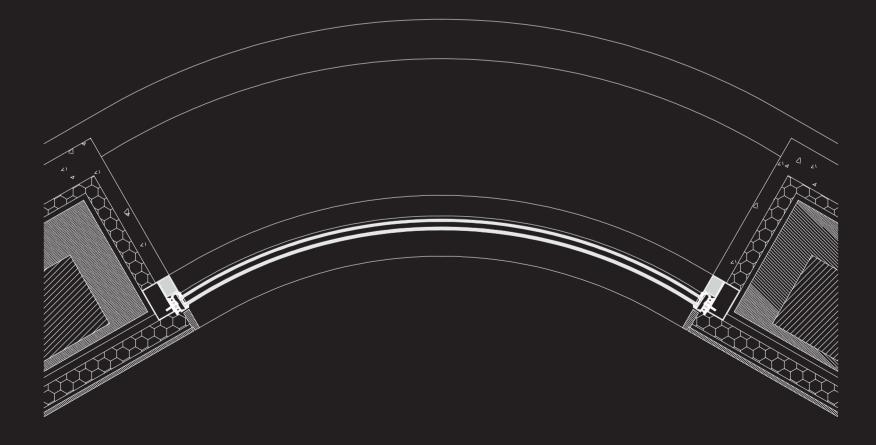


Curved Frame System



Project by OTIIMA Spain Photographer Carles Sánchez **Year** 2017 System 38 Classic

OTIIMA's custom-made curved frame system brings an aesthetic appeal not only to the windows but to the whole architecture of the space. Engineered accurately to present new possibilities for breathtaking visual effects in every project. The custom-made windows can accommodate a sliding or fixed unit according to the project requirements. The beautifully curved panels create a stunning architectural statement to any building, from basements to doors, showcasing the surroundings.



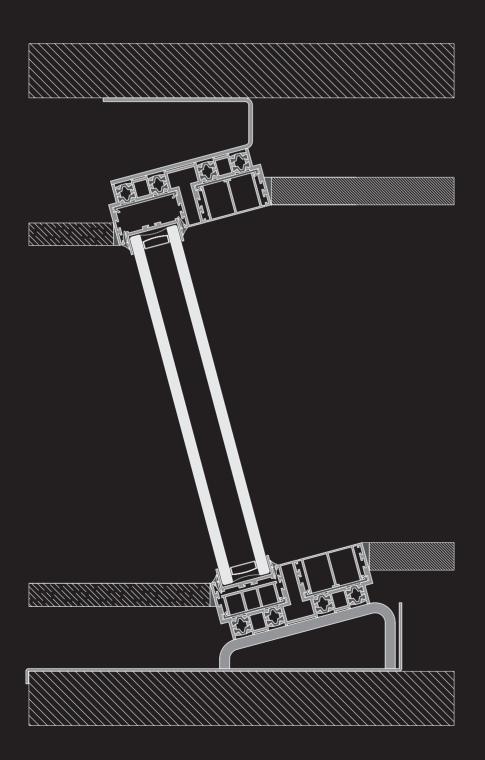
Sloped Frame System



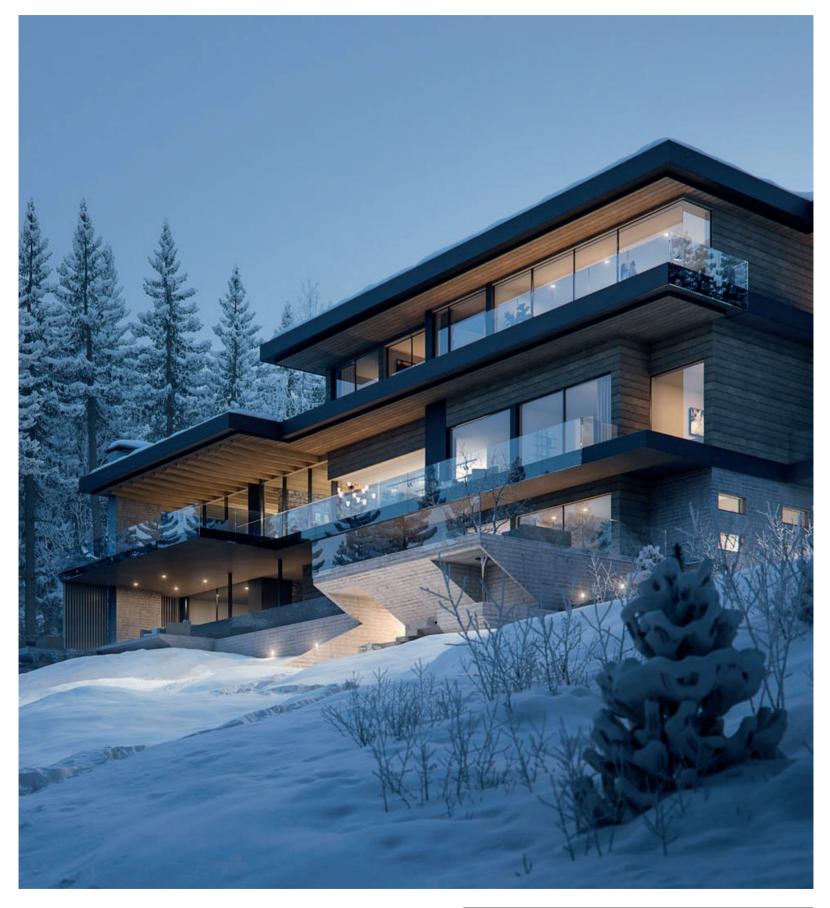
Project by OTIIMA **Photographer** OTIIMA **Year** 2019 **System** 38 Classic

OTIIMA minimalist sloped system is the perfect solution for diagonally opening sliding windows.

The clean lines of the sloped system are almost an accurate perception of the effect of gravity. The toughened glass allows matchless resistance for large-glazed panels while the minimalist framing allows seamless integration in the floor, ceiling and walls, ensuring full transparency between interior and exterior. The slopped system is ideal for sloping roofs or a wide range of other architectural applications.



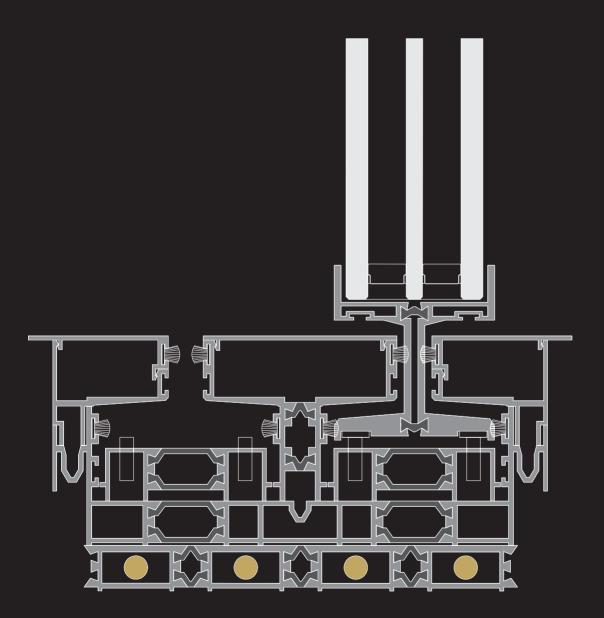
Heated Frame System



Project by OTIIMA Canada

Year 2022 **System** 38 Drain

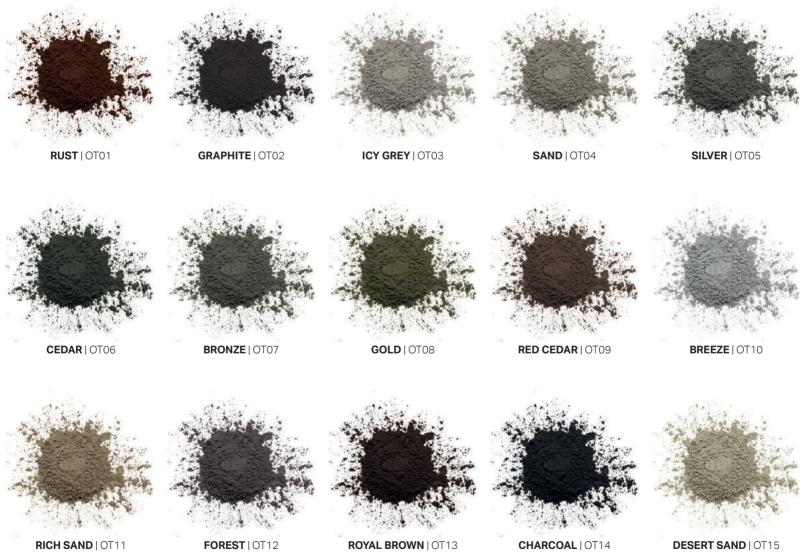
Developed with the latest technology having in mind customers' comfort and well-being, the special heating system is equipped with minimalist lining to heat the edges of cold and wet windowpanes. **OTIIMA heated frame windows** allow the improvement of house thermal parameters. In addition, reduces the risk of condensation and ice formation, especially in the corners and drainage.





Celebrating the **colours** of our world

When OTIIMA decided to bring vibrant colours to minimalist windows, found inspiration in the astonishing Portuguese Flora, particularly in the species that are threatened with extinction. OTIIMA Colours Palette aims to bring a unique touch to the look and style of every project: residential, commercial or hospitality the result promises to be always astonishing. While OTIIMA works effortlessly to deliver impeccable and cutting-edge design, it is engaged in taking care of the future without compromise. Many of the toughest problems we face are due to the materials and processes used in the industry of metalwork, which is why we are committed to developing practices that will not damage our environment. This special colour palette will provide all customers with a rich, deep texture paint finish, durable and scratch resistant.



























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