

TECHNAL

CONTEMPORARY DESIGN
IN ALUMINIUM GLAZING

Photo Credits : Nitson and Amitsu



TECHNAL

By  Hydro

/ A RANGE AS BIG AS THE WORLD YOU WANT TO CREATE

At TECHNAL we prefer to describe our range as flexible, rather than wide. In our view, the difference lies not only in variety, but in versatility, efficiency and capacity for implementation that meets the needs of any space.

We provide solutions that connect indoor and outdoor spaces with large glazed surfaces and highly versatile designs that respond to market needs. We also develop products that cover the specific needs of each country, which widens our area of influence.

TECHNAL has made-to-measure solutions for all your projects, adding personality and unique levels of comfort.



“WHERE OTHERS SAW ALUMINIUM, WE SAW THE FUTURE”

Imagination is a gift.
It enables you to dream. To fly.
To reach new places.
Anticipate what will happen.
Those who spend their time imagining,
Are the ones who change things.
They create. They inspire. They challenge.
They move ahead and lead the way.
Imagination moves the world.
At TECHNAL, we move with it.
It's a way of doing things.
That's why, where others see only doors and windows,
We see new possibilities.
We see creativity and design at the service of people. We see what is to come.
A way of thinking that has brought us here.
We are a company that has grown, always looking to the future.
Today we are innovators.
Tomorrow, we'll be everything our imaginations can conceive.



IMAGINE WHAT'S
NEXT

/ A COMPREHENSIVE RANGE FOR ALL YOUR PROJECTS

In addition to its 60 years of experience in creating innovative solutions for aluminium windows, doors and façades, Technal has also gained experience on five continents where it operates. This legacy has allowed it to work with a large number of architects, some well known, others emerging, which has resulted in the acquisition of a global vision that knows no bounds, enabling it to provide effective solutions to the most complex architectural issues.

/ THE BRAND OF CHOICE FOR ARCHITECTS

Technal offers a wide variety of different solutions to create a dialogue between the interior and the exterior of buildings and to design façades that revolve around large glazed surfaces. For all markets from construction to residential, from new builds to renovations. Curtain walling, windows and doors are available in many different versions and thus offer appropriate solutions to the different needs expressed by the industry's professionals.

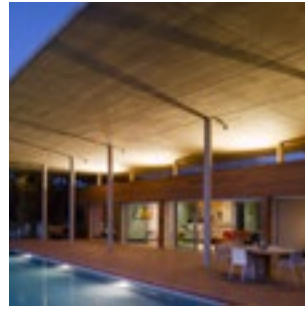
/ CUSTOMISED SOLUTIONS AND PROJECT GUIDANCE

The design and technical support teams are based on site so that they can work closely with architects and fabricators to produce high quality installations for all types of buildings, and also develop unique profiles. Technal has the resources to fulfil the requirement of each and every project through tailor made designs: for specific applications, performance enhancements and innovations.

Support for architects:

- Engineering services
- Structural and thermal calculations
- Costing
- CAD / BIM
- Weather resistance tests in our ITC test center

/ MARKET PRESENCE ACROSS MANY DIFFERENT SECTORS



INDIVIDUAL HOUSING

Architect: Cabinet Koffi and Diabaté
Photographer: DR TECHNAL



RENOVATION

Architects: Julie Fabre and Mathieu De Marien - Photographer: Stéphane Chalmeau



COLLECTIVE HOUSING

Architects: Architectures Anne Démians - Photographers: Dominique Gauthery / Laure Vasconi / Pierre-Olivier Deschamps



TOURISM, LEISURE AND TRANSPORT

Architect: Moshe Safdie
Photographer: Timothy Hursley



EDUCATION AND CULTURE

Architects: Nelly Brandon and Olivier Fraise (Terreneuve)
Photographer: Daniel Rousselot



HEALTH AND WELL-BEING

Architects: Carlos Ferrater and Alfonso Casares
Photographer: Joan Guillamat



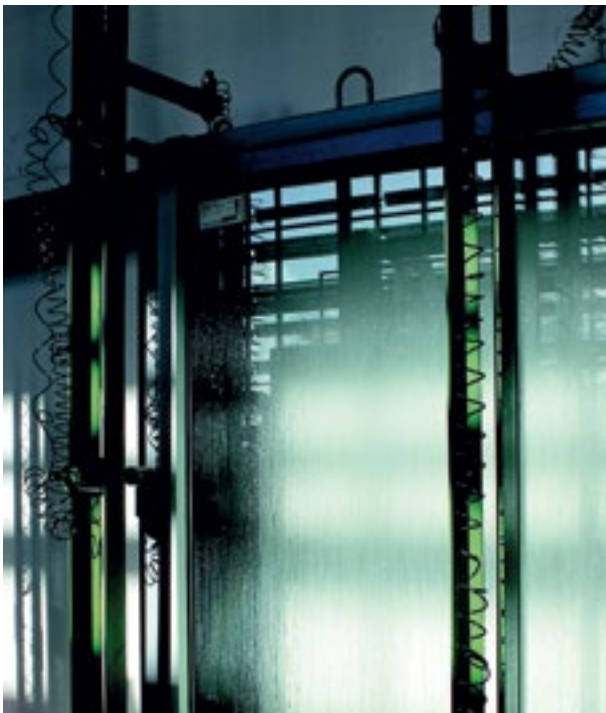
OFFICES AND SHOPS

Architect: Jean Pierre Meignan
Photographer: Willy Berre



SKYSCRAPER

Architect: Esteban Y Tan & Associates - Photographer: DR TECHNAL



/ A BRAND DRIVEN BY INNOVATION

We are not afraid to go first, that's why we progress more quickly.

TECHNAL Test Center in Toulouse (France) has no equivalence in the aluminium joinery world. It conducts all kinds of preliminary studies at the prototype stage, as well as multiple tests on finished products, which include a whole battery of test benches: Mechanical resistance, Opening-closing, Manoeuvrability, Shocks, Thermal resistance, Corrosion resistance, AEV (Air permeability, Water tightness, Wind pressure resistance), Acoustic.

This Test Center provides a wealth of information that is then shared and disseminated around the world, according to national standards and regulations, in order to be able to offer in each market high quality products that go beyond the most stringent requirements in terms of quality regulations.



/ DESIGN MARKS OUR DIFFERENCE

At TECHNAL, design is not just about purely aesthetic considerations. On the contrary, it is a constant concern that encompasses several complementary dimensions: functionality, respect for the environment, ergonomics, energy savings, integration and why not, a good dose of singularity.

In addition, special attention is given to colour processing, with the combination of exclusive colour lines and traditional collections, the offer of various finishes (anodized, powder coated, finishes, etc.).

Finally, the wide variety of handles and accessories offers all the flexibility to be able to adapt in harmony with different architectural styles.



/ STRIVING FOR BEING SUSTAINABLE

We strive for responsible conduct throughout our operations. System solutions using Hydro CIRCAL have the highest share of recycled end-of-life aluminium on the market: 75 % and more. The production process is independently certified according to ISO 14064 and completely traceable.

Our innovative system solutions assure developers, architects and investors that their projects meet the requirements of sustainable certification. Our systems carry the sustainability product pass of the ift Rosenheim, the EPD of the Institut Bauen und Umwelt e.V. and the international Cradle to Cradle certification.



GEODE MX / CREATIVE CURTAIN WALL

WITH THERMAL BREAK

52 mm module

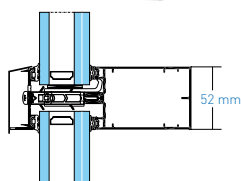
- Curtain walling and skylight system with a unique 52mm frame
- Glass thickness from 6 to 42 mm
- Weight up to 400 kg

DESIGN OPTIONS

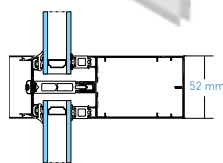
- Visible grid
- Horizontal or Vertical line aspect
- 100% glazed and frame aspect
- Compatible with Suneal brise-soleil
- Faceted curved walls
- Roof light with a grid and vertical line aspect for roofs from 18 to 60 degrees

PERFORMANCE

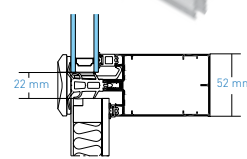
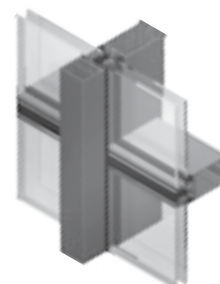
- High inertia
- Best performance: Ucw of 1.3 to 1.1 W/m².k (with Ug=1.1 W/m².k)
- Acoustic attenuation up to 40db (RA,tr)
- Air (Class 3) Water (E1200Pa) Wind (Class C5) Burglar Resistance (RC2)



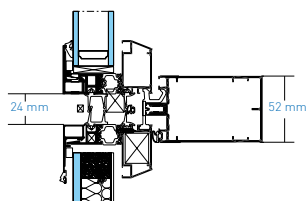
GEODE VISIBLE GRID



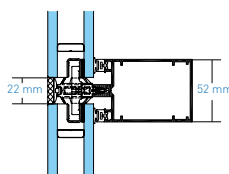
GEODE HORIZONTAL TRAME



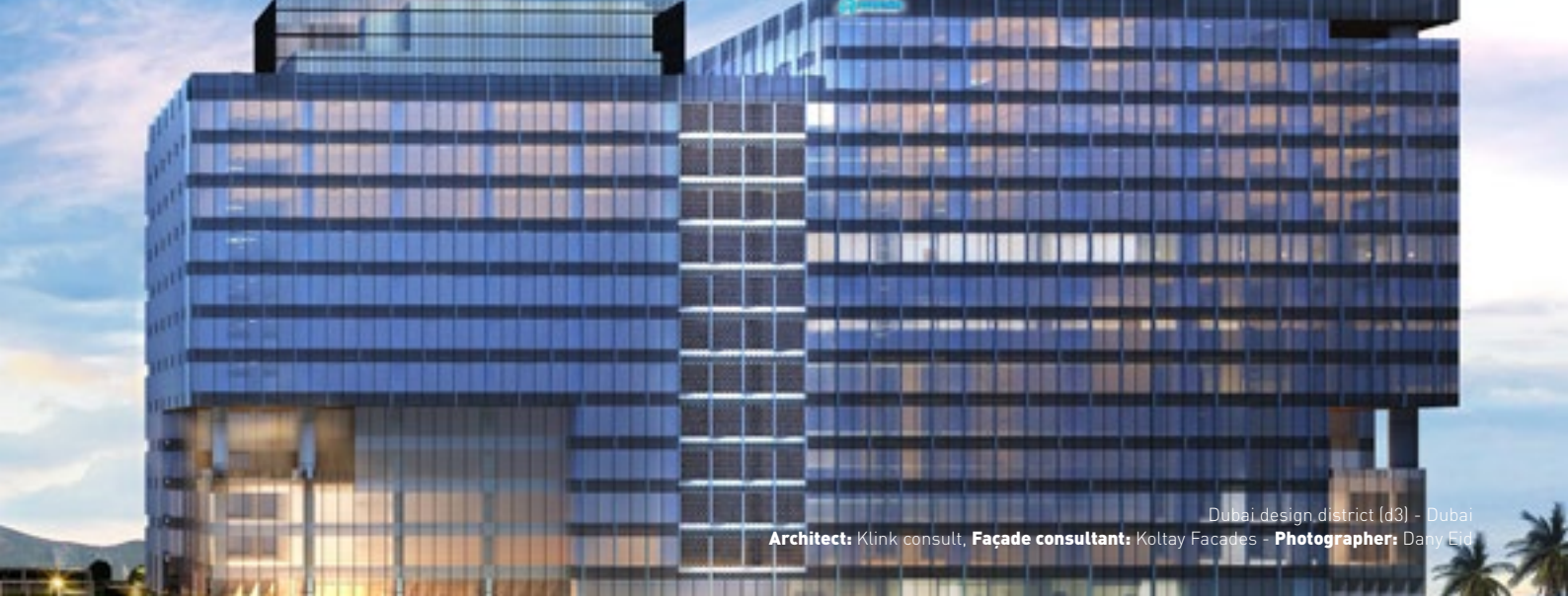
GEODE VERTICAL TRAME



GEODE FRAME ASPECT



GEODE ALL GLASS ASPECT

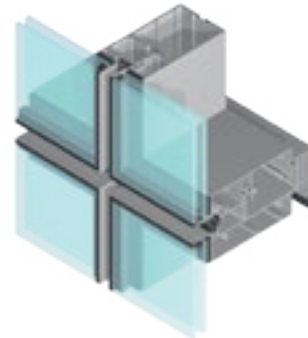
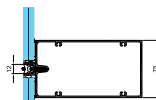
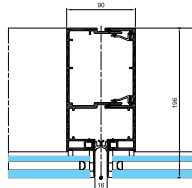
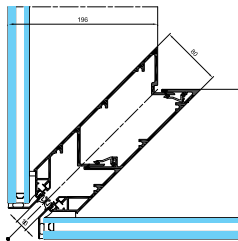


Dubai design district (d3) - Dubai
Architect: Klink consult, **Façade consultant:** Koltay Facades - **Photographer:** Dany Eid

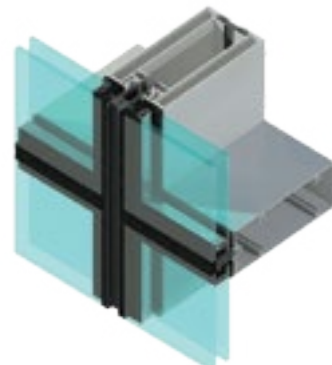
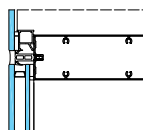
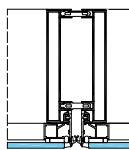
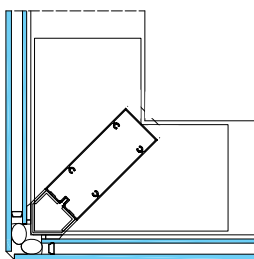
GEODE MX / UNITIZED CURTAIN WALL

GEODE MX ML (American) & GEODE MX EL (European)

- 90 or 75 mm sight lines
- Grid aspect façade
- Single or double glazing
- Glazing thickness according to specification (dimensions and wind pressure)
- All product concepts accommodate vertical and horizontal movements
- Integration of SSG concealed top hung for open out windows
- Glazing and sealing of façade elements within factory
- Both concepts allow glass replacements on site
- 4 sided structural sealant with edge protection or 4 sides beaded glazing
- Possibility of:
 - Integration of BMU requirements
 - Integration of vertical caps and/or horizontal caps
 - Attaching decorative features as fins, sun breakers blades...



GEODE MX ML



GEODE MX EL



TENTAL MZ / THE CIRCULAR FAÇADE

WITH THERMAL BREAK

50 mm module

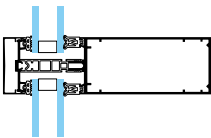
- . Collection of caps that mark the identity of each facade
- . Large infill up to 12.25 m²
- . Maximum Infill thickness 62 mm
- . Maximum infill weight up to 850 kg
- . Designed for assembly and disassembly
- . Made of recycled materials

DESIGN OPTIONS

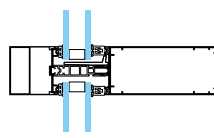
- . Multiple exterior aspects:
 - . Feature cap aspect
 - . Horizontal line aspect
 - . Vertical line aspect
 - . Flat cap aspect
 - . Structural silicone glazed aspect
 - . Bead glazed aspect
- . A full pallet of exclusive colours

PERFORMANCE

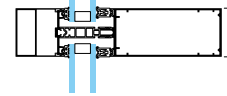
- . According to EN standards
- . Air: class 4 - Water: class RE 1500 Pa
- . Wind pressure: service pressure 2000Pa - security pressure 3000 Pa
- . Burglar resistance RC2 and RC3
- . Impact resistance up to I5/E5



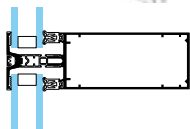
TENTAL FEATURE CAP



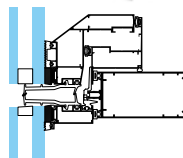
TENTAL HORIZONTAL LINE



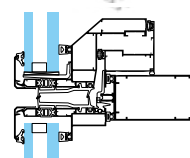
TENTAL VERTICAL LINE



TENTAL FLAT CAPS



TENTAL SS6



TENTAL B6

SLIDING SYSTEMS



ALTAIR residential building
Photo credits: Nitson and Amitsu

TOPAZE GB24 / THE CONTEMPORARY SLIDING SYSTEM



WITHOUT THERMAL BREAK

75 mm module

Applications:

- . 2, 3 tracks
- . 2 to 6 leaves

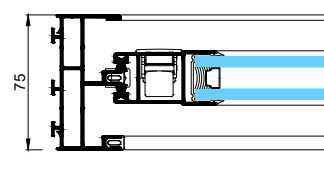
Glass infill: 6 to 25 mm

Max dimensions: Up to 3 m high

Max weight: 140 kg per leaf

Performances:

- Patio door 2 leaves [W 2.2 x H 2.4]
- Air permeability: 300 Pa - ASTM E283
- Water tightness: 300 Pa - ASTM E331
- Wind pressure resistance: 2000 Pa - ASTM
- Acoustic performance: 35 dB [RA, tr] 2-leaf window [W 1.47 m x H 1.48 m]



TOPAZE GB+ / THE BIG SIZE CONTEMPORARY SLIDING SYSTEM



WITHOUT THERMAL BREAK

92 mm module

Applications:

- . 2, 3 and 4 tracks
- . 2 to 8 leaves

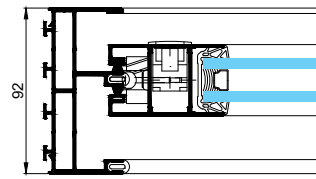
Glass infill: 6 to 31 mm

Max dimensions: Up to 3 m high

Max Weight per: 200 kg per leaf

Performances:

- Patio door, 2 leaves [W 1.80 m x H 2.6 m]
- Air permeability: 300 Pa - ASTM E283
- Water tightness: 300 Pa - ASTM E331
- Wind pressure resistance: 2300 Pa - ASTM
- Acoustic performance: 35 dB [RA, tr]



CITAL GL+ / THE BASIC SLIDING SYSTEM



WITHOUT THERMAL BREAK

74 mm module

Applications :

- . 2, 3 tracks
- . 2 to 6 leaves

Glass Infill: 6 to 18mm

Maximum dimensions:

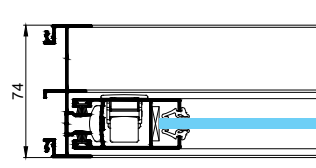
- . Up to 2.4mt High

Maximum Weight :

- . 120 kg per leaf

Performances :

- 4 leaves (Panel Width: 1.0m x Height: 2.4m)
- Air permeability: 150 Pa - ASTM E283
- Water tightness: 250 Pa - ASTM E331
- Wind pressure resistance: 2000 Pa - ASTM



SOLEAL GY / UNIVERSAL SLIDER



WITH THERMAL BREAK

65 mm Module

Applications :

- 2 to 4 tracks - 2 to 8 leaves (pocket window up to 4)
- External or internal corner solution, up to 4 leaves
- All applications are available with concealed drainage and disabled access threshold

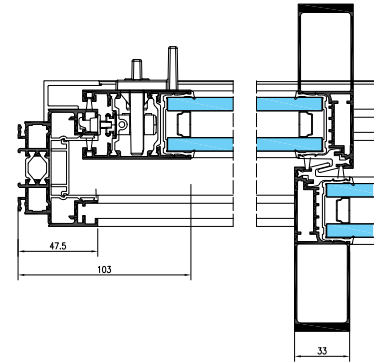
Glass Infill : 24 to 32 mm

Maximum Dimensions : up to W 4.3m x H 2.6m
(2 leaves-2 tracks)

Maximum Weight : up to 200KG

Performances :

- $U_w = 1.4 \text{ W/m}^2\text{K}$ with $U_g = 1,0 \text{ W/m}^2\text{K}$ + insulating reinforcement (W 4.30 m x 2.60 m)
- Air: Class 4 - Water: Class 6A - Wind: Class B2 sliding door 2 tracks - 2 leaf W 3m x H 2.50 m
- Acoustic performance 34db (RA,tr)



LUMEAL & LUMEAL XXL / MINIMAL SLIDER



WITH THERMAL BREAK

100 mm Module

Applications :

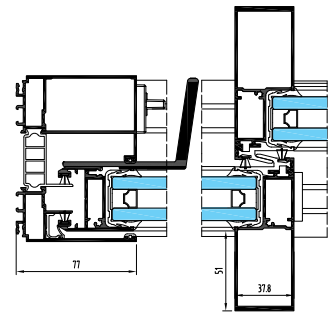
- 2 to 3 tracks - 2 to 6 leaves

Maximum Dimensions : Up to W 5.30 m x H 2.70 m (2-leaf)

Maximum Weight : up to 600KG

Performances :

- 1 leaf + fixed frame (W 4.5 m x H 2.70 m)
- $U_w = 1.2 \text{ W/m}^2\text{K}$ with $U_g = 1,0 \text{ W/m}^2\text{K}$
- Air: Class 4 - Water: Class 7A - Wind: Class B3
- Acoustic performance 35db (RA,tr)
- Burglary resistance level 3 (CR3) following EN 1627-30



LUMEAL GA / MINIMALISTIC SLIDING SYSTEM



WITH THERMAL BREAK

100 mm module

Maximum dimensions:

- W 2m x H 3m

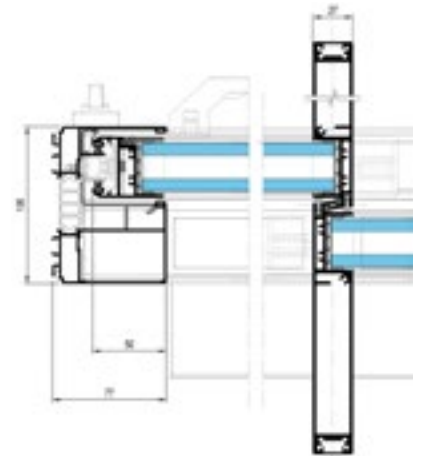
Maximum Weight : 350 kg per leaf

Interlock: Slim width 27 mm

Sill: Concealed bottom rail

Performances :

- Security : Level RC2 and PAS24
- Minimal manoeuvring effort: Class 1
- $U_w = 1.65 \text{ W/m}^2\text{K}$ with $U_g = 1 \text{ W/m}^2\text{K}$
- 2 leaves door WxH= 2.60m x 3.00m
- Air: 300 Pa - Water: 390 Pa - Wind: 3000 Pa (design) 4500 Pa (Ultimate)
- Tested as per ASTM standards



GALENE GTi / PANORAMIC SLIDING SYSTEM



WITH THERMAL BREAK

126 mm module

Applications :

- 2 to 4-leaf on 2 tracks
- 3 and 6-leaf on 3 tracks
- 2, 3 or 4 points locking systems activated by a special handle (single or double)
- Possibility of glazing with an integrated blind for solar protection

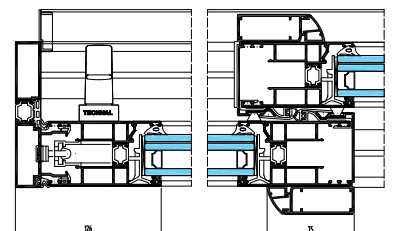
Maximum dimensions:

- Big dimensions up to W 5 m x H 2.5 m with 2-leaf

Maximum Weight : 300 kg per leaf

Performances :

- Sliding patio door 2-leaf on 2 tracks (W 3 m x H 2.20 m)
- $U_w = 1.6 \text{ W/m}^2\text{K}$ with $U_g = 1,0 \text{ W/m}^2\text{K}$
- Air: Class 4 - Water: Class 9A - Wind: Class C3



SOLEAL GYn / UNIVERSAL SLIDER



WITHOUT THERMAL BREAK

65 mm Module

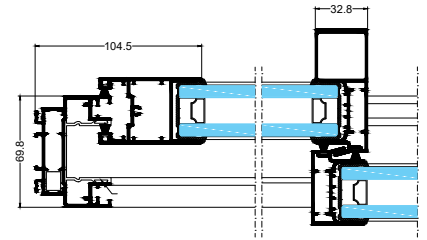
Applications :

- 2 to 4 tracks - 2 to 8 leaves (pocket window up to 4)
- External or internal corner solution, up to 4 leaves
- All applications are available with concealed drainage and disabled access threshold

Glass Infill : 24 to 32 mm

Maximum Dimensions : up to W 4.3m x H 2.6m
(2 leaves-2 tracks)

Maximum Weight : up to 200KG



LUMEAL & LUMEAL XXL NTB / MINIMAL SLIDER



WITHOUT THERMAL BREAK

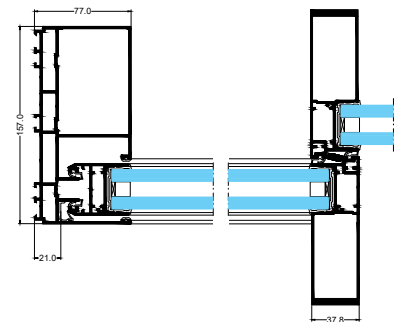
100 mm Module

Applications :

- 2 to 3 tracks - 2 to 6 leaves

Maximum Dimensions : Up to W 5.30 m x H 2.70 m (2-leaf)

Maximum Weight : up to 600KG



LUMEAL GAn / MINIMALISTIC SLIDING SYSTEM



WITHOUT THERMAL BREAK

100 mm module

Maximum dimensions:

- W 2m x H 3m

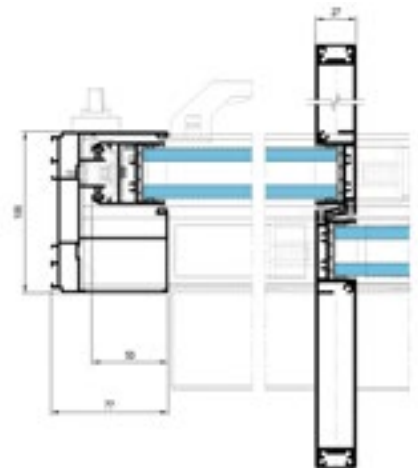
Maximum Weight : 350 kg per leaf

Interlock: Slim width 27 mm

Silt: Concealed bottom rail

Performances :

- Security : Level RC2 and PAS24
- Minimal manoeuvring effort: Class 1
- Air: 300 Pa - Water:390 Pa - Wind: 3000 Pa (design) 4500 Pa (Ultimate)
- Tested as per ASTM standards



GALENE GT / PANORAMIC SLIDING SYSTEM



WITHOUT THERMAL BREAK

126 mm module

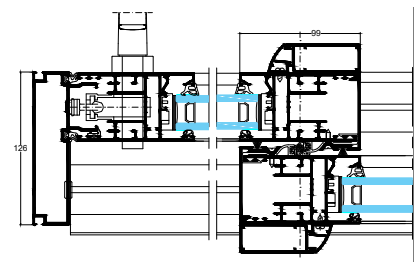
Applications :

- 2 to 4-leaf on 2 tracks
- 3 and 6-leaf on 3 tracks
- 2, 3 or 4 points locking systems activated by a special handle (single or double)
- Possibility of glazing with an integrated blind for solar protection

Maximum dimensions:

- Big dimensions up to W 5 m x H 2.5 m with 2-leaf

Maximum Weight : 300 kg per leaf





GALENE HP / HIGH PERFORMANCE PANORAMIC SLIDING SYSTEM



WITH THERMAL BREAK

140 mm module

Applications :

- 1 leaf + 1 fixed
- 2 leaves

Maximum dimensions:

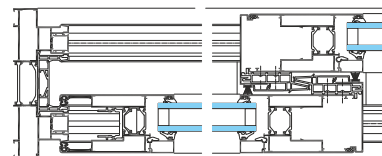
- up to W 3.2m x H 3.4 m

Maximum Weight : 400 kg per leaf

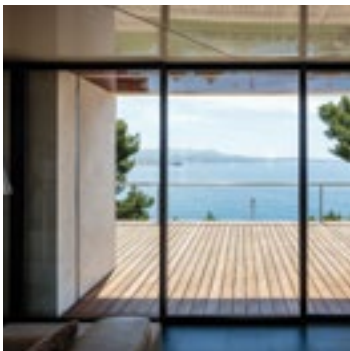
Performances :

Sliding patio door 2-leaf on 2 tracks (W 3 m x H 2.20 m)

- Uw= 1.6 W/m²k with Ug=1,1 W/m²k
- Air: Class 4 - Water: Class 9A - Wind: Class A3
- Acoustic 40db
- RC2 and RC2N classification in burglary resistance



P70 / HIGH PERFORMANCE SLIDER



WITH THERMAL BREAK

110 mm module

Applications :

- 2 to 4 tracks - 2 to 8 leaves
- Angled opening solution, without corner post

Glass Infill : 24 to 36 mm

Maximum Dimensions : W 3.2 m x H 3 m

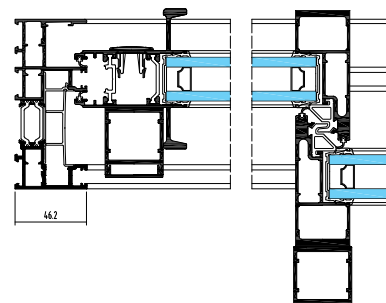
Maximum Weight : 250 kg

Performances :

- Uw= 1.8 W/m².K with Ug=1,0 W/m².k
- Air: 300 Pa - Water: 600 Pa - Wind: 3 KPa (4.5 KPa proof load)
- Acoustic performance 34db (RA,tr)
- Tested as per ASTM standards

Highlights :

- High performance with maximum natural light
- Minimalistic profiles design (35 mm aperture)



ARTLINE & ARTLINE XL / MINIMAL LARGE SLIDERS



WITH THERMAL BREAK

150 mm module

Applications :

- 2 to 3 tracks - 2 to 6 leaves
- Angled opening solution, without corner post
- Full access sliding system

Glass Infill : up to 52 mm

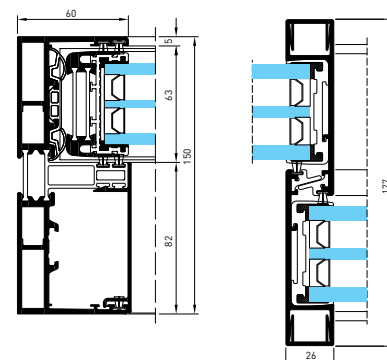
Maximum Dimensions : height up to 4.5m

Maximum Weight : 1200 kg per leaf

- Motorize leaves weighing more than 500 kg

Performances :

- 1 leaf + 1 fixed, W x H = 3000 x 2800 mm)
- Uw< 1.0 W/m².K with Ug=0.5W/m².k
- Air: class 4 - Water: class E900 - Wind: class C3
- Acoustic performance 36db (RA,tr)
- Safety: Burglar resistance: RC2





Private Residence
Architect: Atelier d'architecture Franck Martinez **Photographer:** Franck Martinez

TIGAL / PULL AND SLIDE



WITH THERMAL BREAK

150 mm module

Applications :

- 1 Rail - Open In : 1 leaf + fixed or 2 leaf + fixed
- Micro-ventilation option
- Recessed threshold

Glass Infill: up to 52 mm

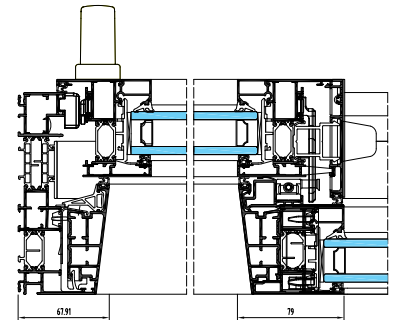
Maximum dimensions:

- Floor-to-ceiling heights possible up to W 4 m x H 2.70 m (1leaf + 1 fixed)

Maximum Weight : 300 kg per leaf

Performances :

- Security : Level RC2 and PAS24
- Minimal manoeuvring effort: Class 1
- $U_w = 0.85 \text{ W/m}^2\text{k}$ with $U_g = 0.5 \text{ W/m}^2\text{k}$
- 1 leaf + fixed, W x H = 2.30 x 2.18
- Air: Class A4 - Water: Class E1200 - Wind: Class 5
- Thermally improved, meets RT 2000 thermal regulations
- Acoustic: 34 dB (Ra, Tr) window 2-leaf W 1.47m x H 1.48m



P70n / HIGH PERFORMANCE SLIDER



WITHOUT THERMAL BREAK

79 mm module

Applications :

- 2 to 4 tracks - 2 to 8 leaves
- Angled opening solution, without corner post

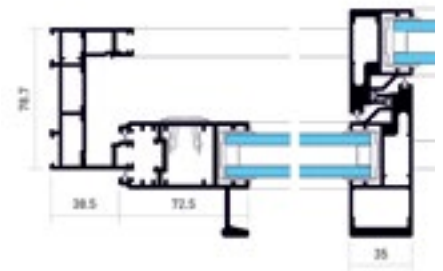
Glass Infill : 24 to 36 mm

Maximum Dimensions : W 3.2 m x H 3 m

Maximum Weight : 250 kg

Highlights :

- High performance with maximum natural light
- Minimalistic profiles design (35 mm aperture)



WINDOWS AND DOORS

TOPAZE FB+ / THE CONTEMPORARY WINDOW



WITHOUT THERMAL BREAK

46 mm module

Applications :

- 1 and 2-leaf window or patio door
- Single & double sash, inward & outward opening, turn/tilt, bottom-hung, top-hung on butt hinges, side-hung outward opening, horizontal and vertical pivot, Composite frames

Glass Infill: Infill from 6 to 33 mm

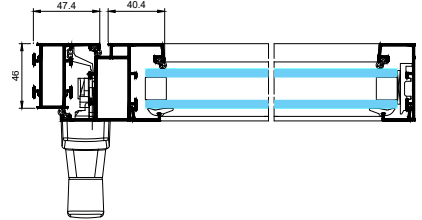
Maximum dimensions:

- W 1.1 m x H 1.8 m

Maximum Weight : 70 kg per leaf

Performances :

- 1 leaf window, outward opening (W 0.8 m x H 1.5 m)
- Air permeability: Class 4
- Water tightness : Class 1050A
- Wind pressure resistance: Class C5
- Acoustic performance: 38 dB (RA. tr) - (L 1.23m x H 1.48m)



SOLEAL PY / UNIVERSAL DOOR



WITH THERMAL BREAK

65mm Module

Applications :

- Door 1 and 2-leaf outward opening
- Door 1 and 2-leaf inward opening
- Composition
- Integration with GEODE façades

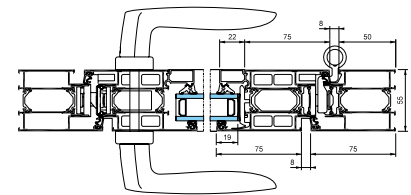
Glass Infill : up to 42 mm

Maximum Dimensions : up to W 1.1m x H 3m

Maximum Weight : up to 150KG

Performances :

- $U_w=1.3 \text{ W/m}^2\cdot\text{K}$, $TL_w=0.49$, $Sw=0.37$ with triple glazing ($U_g=0.6 \text{ W/m}^2\cdot\text{K}$ and warm edge)
- Air: Class 4 - Water: Class 6A - Wind: Class C3
- Burglary resistance: Class level 3
- Intensive use door, Class 8 (tested at 1 million cycles)



SOLEAL FY / THE UNIVERSAL WINDOW



WITH THERMAL BREAK

55 mm module

Applications :

- Fixed frame, Open-in., Open-out
- Adapted fly-screen solution.

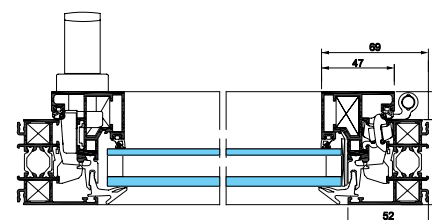
Glass Infill : up to 42 mm

Maximum Dimensions : up to W 2.40 x H 2.25 m

Maximum Weight : up to 140 kg

Performances :

- 1 leaf tilt & turn window (W 1.20 m x H 1.60 m)
- Air: class 4 - Water: class E1200Pa - Wind: class C5





Residential Building LLEIDA
 Architect: Alventosa Morell arquitectes Photographer: Adria Goula

TOPAZE PB+ / THE CONTEMPORARY DOOR



WITHOUT THERMAL BREAK

46 mm module

Applications :

- . 1 and 2 leaves, inward and outward opening
- . Single action opening via split hinge or double action opening via an in-ground pivot

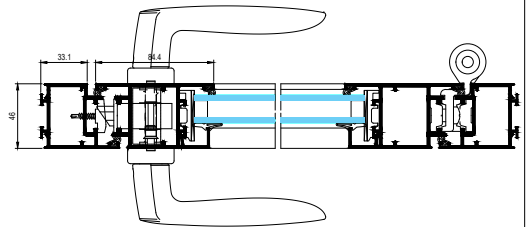
Glass Infill: 6 to 33 mm

Maximum dimensions:

- . Max dimensions up to W 1.10 m x H 2.40m.

Maximum weight:

- . 120 Kg per leaf



SOLEAL PYn / UNIVERSAL DOOR



WITHOUT THERMAL BREAK

55mm Module

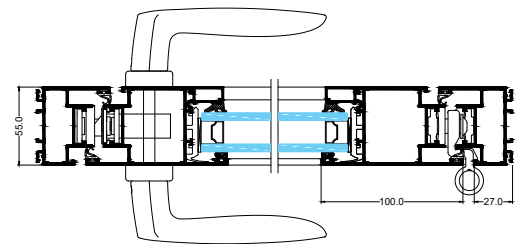
Applications :

- . Door 1 and 2-leaf outward opening
- . Door 1 and 2-leaf inward opening
- . Composition
- . Integration with GEODE façades

Glass Infill : up to 42 mm

Maximum Dimensions : up to W 1.1m x H 3m

Maximum Weight : up to 150KG



SOLEAL FYn / THE UNIVERSAL WINDOW



WITHOUT THERMAL BREAK

55 mm module

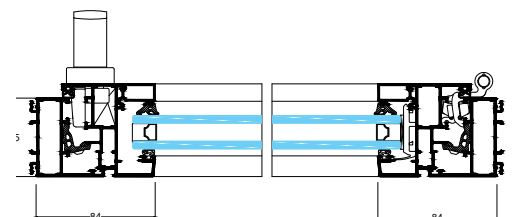
Applications :

- . Fixed frame, Open-in-, Open-out
- . Adapted fly-screen solution.

Glass Infill : up to 42 mm

Maximum Dimensions : up to W 2.40 x H 2.25 m

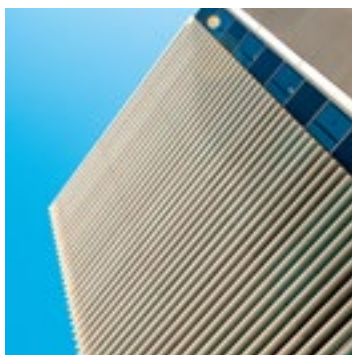
Maximum Weight : up to 140 kg



SOLAR PROTECTION



SUNEAL / MULTIFUNCTION BRISE-SOLEIL

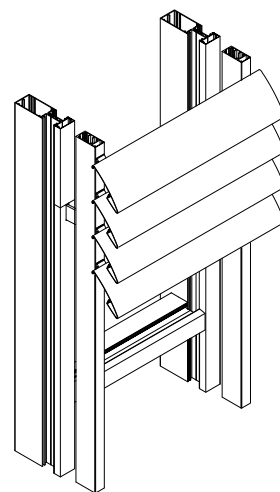


Applications :

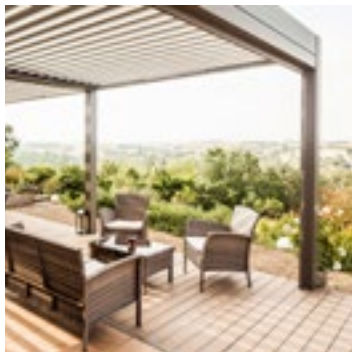
- . A complete selection of accessories allows installation: on a canopy, on an offset vertical structure, or on a roof light.
- . Installation: on aluminium structure offset from the facade, on canopy with stays, on roof light, on independent bearing structures.
- . A wide choice of sun shading blades is available
- . Angle of 15°, 30°, 45°, 60°

Maximum dimensions:

- . Fixed blades from 100 mm to 150 mm.



SUNEAL PERGOLA / THE MULTI SEASON LIVING SPACE



Applications :

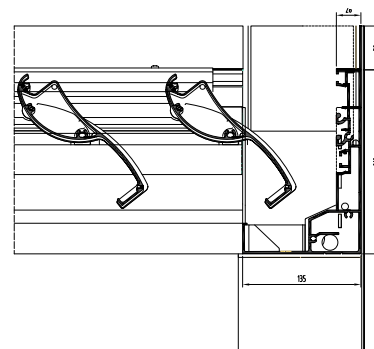
- . Isolated, leaned on the wall, between walls, in angle, combination

Maximum Dimensions :

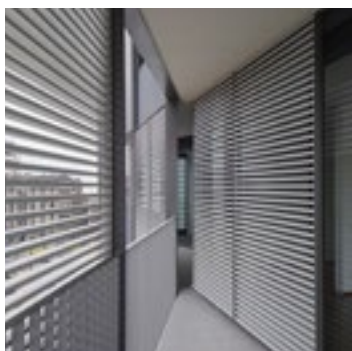
- . 1 module: 4,5 x 6,5 m
- . 1 module with transom: 4 x 7 m

Performances :

- . Motorization tested over 20.000 cycles
- . Tested in wind tunnel at CSTB*: 230 km/h in version leaned to the wall with flat blades
- . Blade orientation up to 130°



NOTEAL / EFFECTIVE PRIVACY AND SOLAR PROTECTION SHUTTER

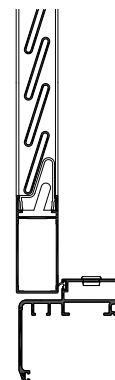


Applications :

- . Single leaf or double leaf
- . fixed or sliding .
- . face mounted or under lintel

Maximum Dimensions :

- . by leaf Y-shaped blade: (Fixed : 3.0 x 1.4 m) - (sliding : 2.4 x 1.4 m)
- . by leaf straight rectangular or leaned blades: (Fixed : 3.0 x 1.2 m) - (sliding : 2.4 x 1.2 m)



BALUSTRADES



The Beach Hotel

Architect: Morris Architects Photographer: Andy Le Gresley

GYPSE / SINGLE POST TRADITIONAL BALUSTRADE



Applications :

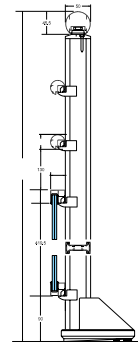
- Balustrade with vertical rails beneath handrail or mid rail: top-fixed to slab, face-fixed to slab, in front of slab, reveal mounted, low-wall mounted
- Straight balustrade with running band under handrail or under mid rail: Running band beneath mid rail with St Andrew's cross, 'Steamship' running band
- Infill can be positioned on the outside face, inside face, or between the posts.

Maximum dimensions:

- Infill (glass / sheet metal): 1600 x 1600mm module
- Balustrading: 1599 x 1599mm Public facility
- Infill (glass / sheet metal): 985 x 985mm module
- Balustrading: 984 x 984mm

Performance:

- Standard compliance: PV testing available (meets latest standards for horizontal loads and glass infill)



GYPSE / THE DOUBLE POST TRADITIONAL BALUSTRADE



Applications :

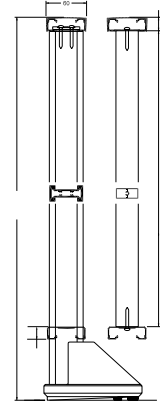
- Straight running band aspect: beneath the handrail, beneath the mid rail, with embellishment, cables and glazing infill, mid rail and glass bottom section
- Raked panels: Running band aspect beneath the mid rail, balustrade beneath the mid rail
- Diversity of forms and applications

Maximum Dimensions :

- 2 posts 50 x 12 mm, spaced 20 mm apart
- 2 half-height posts forming a 50 x 24 mm section

Performances :

- Compliance with standards: test report available (brought into line with the latest changes to standards in relation to horizontal loads and glass infill).



GYPSE GLASS / GLAZED BALUSTRADE



Applications :

- Continuous base profile of 65mm or 120 mm depth and 120 mm height - 180 degrees connections made with stainless steel pins
- Extruded aluminium profile in alloy AW6060 T6
- over the slab, embedded in the slab, in front of the slab

Glass Infill : 13.52 to 27.52 mm

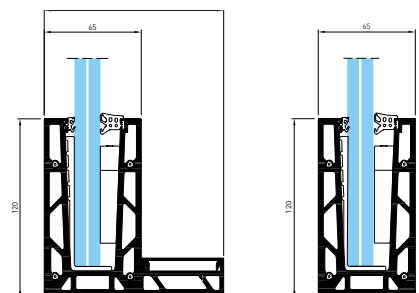
Maximum Dimensions :

- Maximum protection height: 1200 mm from finish floor level

Maximum Weight : 250 kg

Performances :

- Compliance with EN and ASTM standards



SAFETY AND SECURITY



Collège de Labarthe-sur-Lèze - France

Architect: LCR architect - Photographer: Sylvain Mille

GEODE MXs 52 / THE BULLETPROOF CURTAIN WALL



WITH THERMAL BREAK

52 mm module

- Used for bullet proof and ballistic facade applications
- Profile options available for variable inertia requirements i.e 110 mm and 120 mm depth
- Adaptable armour plating with steel or aluminium profiles
- Tested as per EN standards for FB4, FB5, FB6 up to FB7 (upon request)
- Can be integrated with TECHNAL Bulletproof sliding doors, windows and hinged doors`



GEODE MX FP 52 / FIRE RATED CURTAIN WALL



WITH THERMAL BREAK

- Solution for all kind of buildings, whether in new construction or in refurbishment: public facilities, collective housing, warehouse.
- Fire rated curtain wall meets 2 levels of certifications: EI60 and EI120 (exterior curve) in accordance with EN 1634
- Tests carried out on each side of the curtain wall
- Compatible with TECHNAL Fire rated doors and partition meets 3 levels of certification: E30, EI30, EI60 in accordance with EN 1634 and 13501 standards.



GEODE MX BP / THE BLAST PROOF CURTAIN WALL



WITH THERMAL BREAK

52 mm and 90 mm modules

- Tested for blast loads in EN standards for EXV 25 category
- Compatible with TECHNAL blast proof single leaf and double leaf hinged doors and fixed windows



PYROAL / THE FIRE SAFETY DOOR



WITHOUT THERMAL BREAK

- 1 or 2-leaf, open-in and anti-panic door configurations
- Possible with a fixed side light and fixed top light
- Glazed partition

Glass Infill: 10 to 49 mm

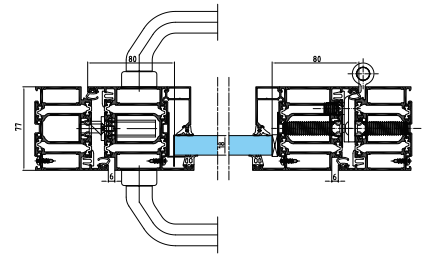
Maximum dimensions:

- 1 leaf door up to W 1.26 m x H 2.49 m

Maximum Weight : 261 kg per leaf

Performances :

- Fire safety certified
- E30 : flame resistance for 30 min
- EI30: fire proofing for 30 min
- EI60: fire proofing for 60 min



COBALT / THE SECURE SOLUTION

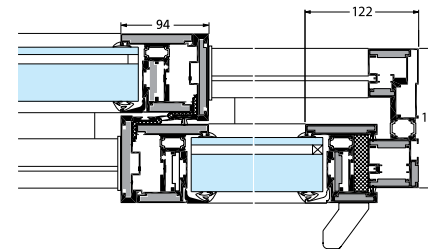


THE SLIDING SYSTEM:

- 2-track 150 mm fixed frame for 2 or 3 leaf sliders
- Maximum weight: 300 kg
- Infill from 39 to 61 mm
- Performance: Slider 2-leaf (W 1.51 m x H 1.31 m)
- Air: Class 3 - Water: Class 7A - Wind: Class A5
- With aluminium armour-plating, FB2, FB3 to FB4
- With steel armour-plating, FB5 and FB6

THE DOOR:

- 63 mm module
- Max dimensions up to: W 1.20 m x H 2.35 m
- Max weight 240 kg
- Movement via 3 part hinges
- Infill from 17 to 66 mm
- With aluminium armour-plating, FSG, FB2, FB3, FB4
- With steel armour-plating, FB5





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IMAGINE WHAT'S NEXT

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