

# WORKING WITH SKY-FRAME.

US



SKY-FRAME



**A VIEW,  
NOT A  
WINDOW.**

Working with Sky-Frame means creating living environments of unparalleled beauty, comfort and experience. The frameless sliding door is a modular system that combines Swiss engineering ingenuity with timeless appeal resulting in an architectural element that makes no compromises.



SKY-FRAME





# SKY-FRAME SYSTEM.

Sky-Frame sliding door systems encompass freely combinable elements that breathe life and light into any style of residence. The organically-curved, rectilinear glass units of the Classic, Arc and Slope systems promise an aesthetically distinctive living experience. Each model guarantees standards of excellence, from the single-glazed Sky-Frame 1 model that lends superior sound-proofing to the double-glazed Sky-Frame 2 and triple-glazed Sky-Frame 3 models that offer additional thermal insulation to meet stringent code requirements. Various add-on features are also available for extra convenience and safety.

Sky-Frame	Classic	Arc	Slope
<hr/>			
Technology			
<b>1</b>	•		
<b>2</b>	•	•	•
<b>3</b>	•	•	•
<hr/>			
Features			
<b>Fly</b> (Insect screen)	•		
<b>Automation</b>	•	•	•
<b>Guard</b>	•	•	•

### Sky-Frame Classic

The rectilinear Classic door system has timeless appeal. True to the Bauhaus vision, the ceiling-height glass facades help to create a minimalist architecture in which the view takes centre stage.

**For technical details, see page 09.**

### Sky-Frame Arc

The organic forms of the Arc model serve to soften the contours of domestic architecture. The curved sliding panels offer a bold counterpoint to the linearity of the spatial and facade composition.

**For technical details, see page 15.**

### Sky-Frame Slope

The Slope system allows the sliding doors to be installed at an angle. The glass fronts can be incorporated with either an inward or outward inclination. The distinctive spatial geometry offers a unique living experience.

**For technical details, see page 19.**

## TECHNOLOGY

### Sky-Frame 1

The single-glazed Sky-Frame 1 system (½") caters for applications without thermal insulation requirements.

**For technical details, see page 24.**

### Sky-Frame 2

The double-glazed Sky-Frame 2 assemblies (1 ⅜") meet high sound and thermal control requirements.

**For technical details, see page 26.**

### Sky-Frame 3

The triple-glazed Sky-Frame 3 technology (2 ⅛") further enhances the thermal insulation performance to meet the most stringent standards.

**For technical details, see page 28.**

## FEATURES

### Sky-Frame Fly (Insect screen)

Sky-Frame Fly allows residents to enjoy summer weather without being plagued by insects. When not in use, the pleated screen fully retracts out of sight into the frame.

**For technical details, see page 31.**

### Sky-Frame Automation

The electric drive allows straightforward and virtually noiseless operation of the sliding elements at the press of a button.

**For technical details, see page 35.**

### Sky-Frame Guard

The Sky-Frame sliding door system is burglar-resistant and can, where required, be fitted with laminated safety glass and additional security hardware concealed in the frame. Alarm sensors can also be integrated to monitor the windows.

**For technical details, see page 39.**

## ENVIRONMENTAL ISSUES

### NFRC

All insulated glass units and technologies are NFRC certified (SKY-M-1) and fulfill the requirements of the NFRC regulations.

### NAMI

The factory production control of Sky-Frame is periodically inspected by the accredited third party NAMI.





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# SKY-FRAME CLASSIC

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## SYSTEM

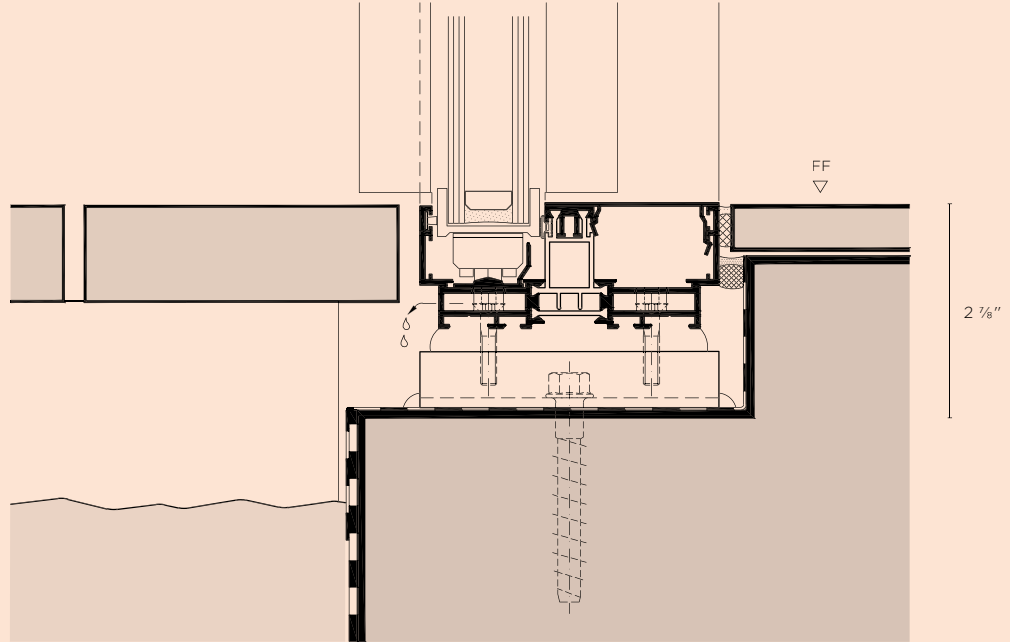
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The name "Classic" evokes the timeless appeal of the rectilinear door assembly while highlighting its historical significance as the premier Sky-Frame system. The sliding door comprise glass units with aluminum or glass fiber reinforced plastic (GRP) perimeter sections. Mounted in streamlined aluminum frames fitted flush with floor and ceiling, each unit rolls fluidly when operated. The system drainage for the flush assembly either runs via a recessed channel or is installed below a raised outdoor floor covering.

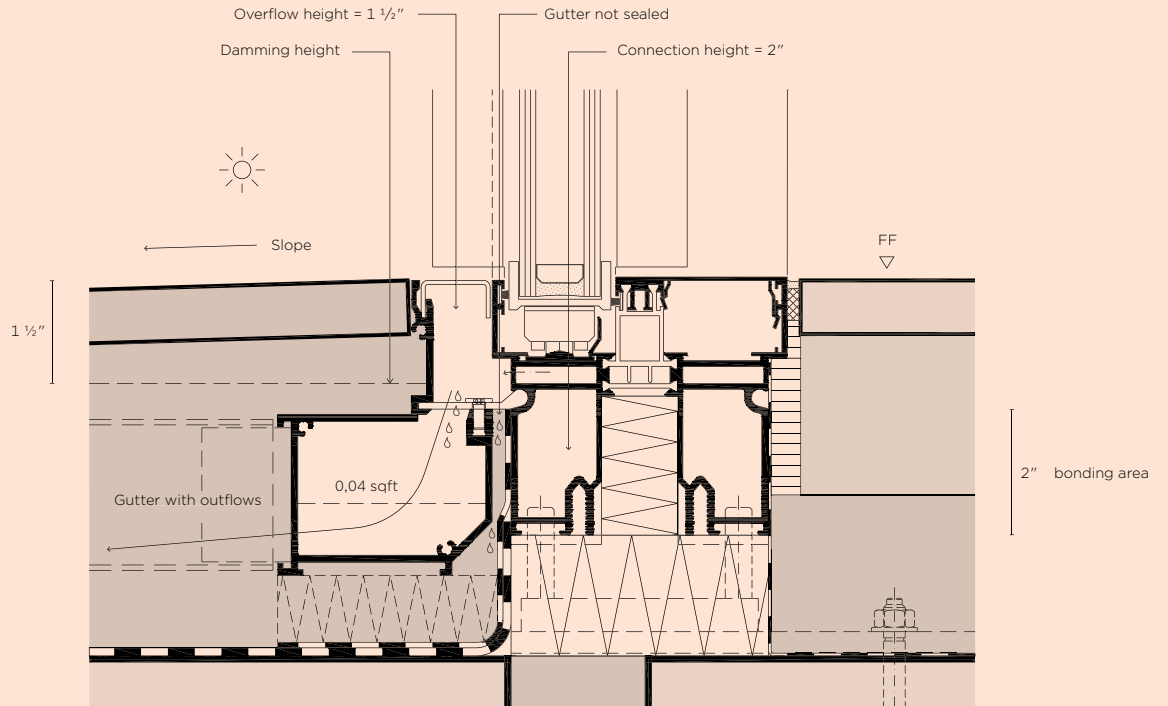
# SKY-FRAME CLASSIC

## SYSTEM

Vertical floor section  
(M 1:3)



Vertical floor section  
(M 1:3)



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## PANEL TYPES

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### Panel types and sizes

- Sliding panels: height <13', width <7'-6", area <86 sqft (larger on request)
- Fixed panel: <10'-4" x <13' (<135.6 sqft). Where edge length in both dimensions exceeds 8'-6", double-glazed insulating glass unit used for Sky-Frame 3 system.
- Centre mullion width:  $\frac{3}{4}$ ", 1" with height of 13', centre opening offset 1  $\frac{5}{16}$ "
- Same panels can also be used for balustrade windows

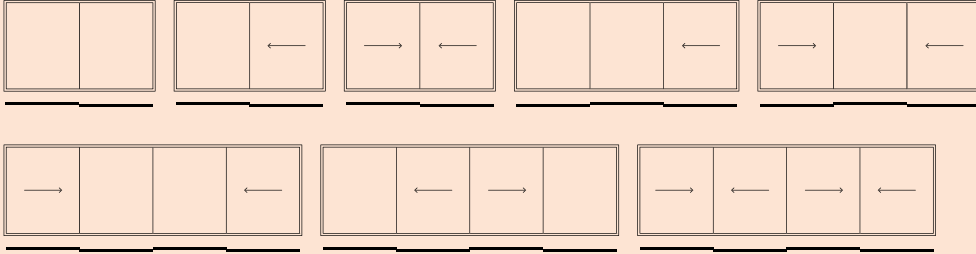
### Multi-point locking

- Unlock integrated handle on frame, operated by gentle move handle upwards
  - Optional: integrated, elegant locking cylinder
-

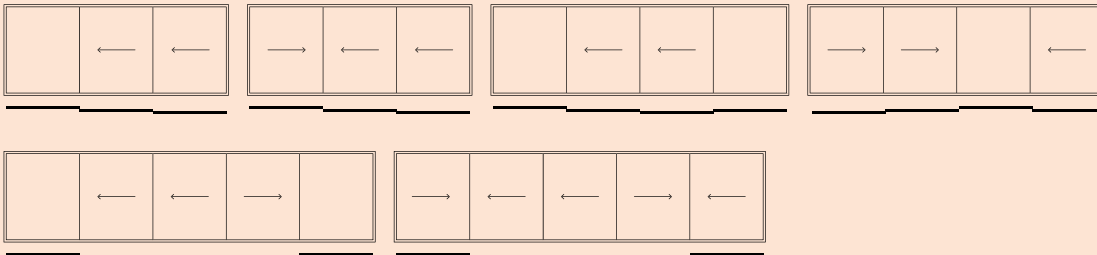
# SKY-FRAME CLASSIC

## OPENING OPTIONS

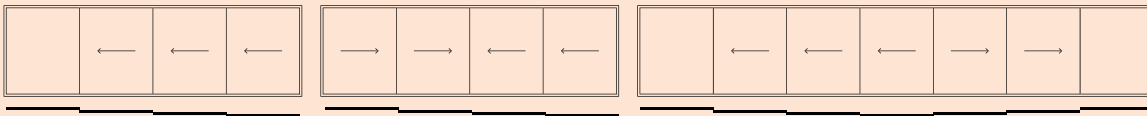
### 2-track sliding doors



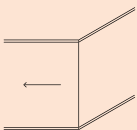
### 3-track sliding doors



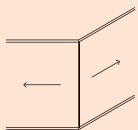
### 4-track sliding doors



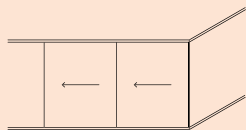
### Corner opening 1+0



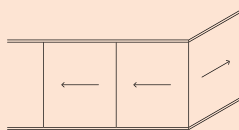
### Corner opening 1+1



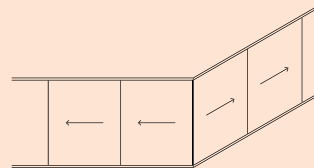
### Corner opening 2+0



### Corner opening 2+1



### Corner opening 2+2



**Types of systems and openings**

- 2-, 3- and 4-track systems available; 4-track systems are only possible with Sky-Frame 2.
  - 5-track systems also available on request;  
5-track systems for Sky-Frame 2 require project specific clarification in advance.
  - Side openings, centre openings offset, centre openings on same track, corner openings
  - Any number of panels can be combined, alternate or symmetrical
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# SKY-FRAME ARC

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## SYSTEM

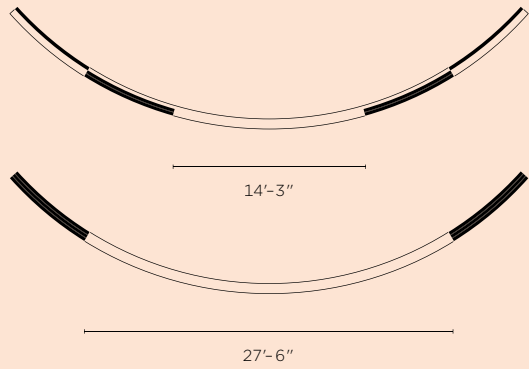
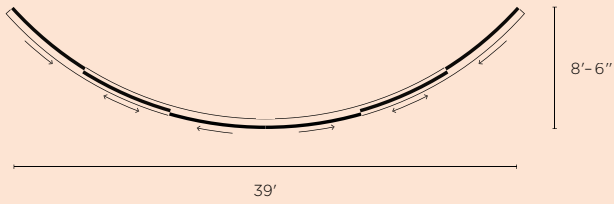
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Sky-Frame Arc offers sliding glass panels to create curved fronts that lend organic, smooth contours to a residential space. The rounded glass units offer smooth running performance and can be equipped with automatic drive. Meeting all Sky-Frame standards, the streamlined Arc system is an architectural feature that inspires endless additional design options.

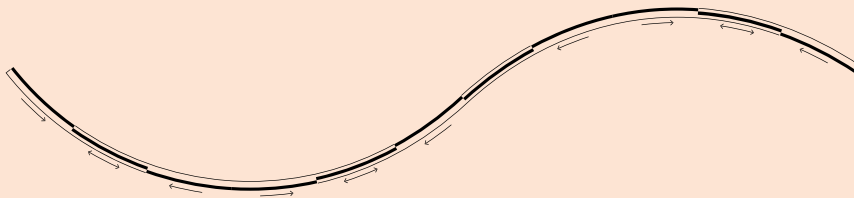
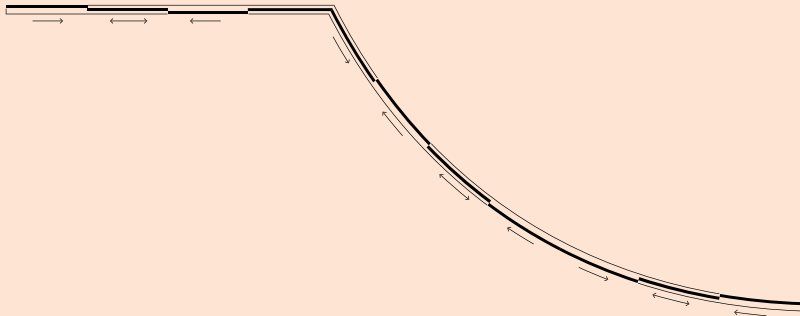
# SKY-FRAME ARC

## OPENING OPTIONS

Opening options



Straight (Classic) and curve track (Arc) combination  
Curve combination (Arc)



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## DETAILS

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Characteristics	Sky-Frame 2	Sky-Frame 3
Glass type	Double-glazed insulating glass	Triple-glazed insulating glass
Glass coating	Thermal insulation and sun protection coating	Thermal insulation and sun protection coating
U-value*	0.33-0.35	0.22-0.23
Sound insulation up to*	R <sub>w, P</sub> 37 dB (EN ISO 717-1 / EN ISO 10140)	R <sub>w, P</sub> 44 dB (EN ISO 717-1 / EN ISO 10140) OITC 42 dB (ASTM E1332)
Sliding panels (max. width x height)	7' 6" x 13' (max. 86 sqft)	7' 6" x 13' (max. 86 sqft)
Radius	on request	on request

### Features

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Sky-Frame Automation on request

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Connection to alarm system:

- Position monitoring
  - Deadbolt monitoring
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\* performance based on Sky-Frame Classic

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# SKY-FRAME SLOPE

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## SYSTEM

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Sky-Frame Slope sliding doors offer the ability to be installed with an inward or outward inclination depending on requirements. The system creates a distinctive spatial geometry while meeting all Sky-Frame standards. The bearing assembly accommodates all vertical and horizontal forces, thereby achieving superior running performance. Regardless of inclination, the system drainage meets all requirements for driving rain resistance.

# SKY-FRAME SLOPE

## DETAILS + INCLINATION OPTIONS

Characteristics	Sky-Frame 2	Sky-Frame 3
Glass type	Double-glazed insulating glass	Triple-glazed insulating glass
Glass coating	Thermal insulation and sun protection coating	Thermal insulation and sun protection coating
U-value*	down to 0.33	down to 0.22
Sliding panels <small>(max. width x height)</small>	Dependent on inclination and glass type	Dependent on inclination and glass type
Number of tracks <small>(max.)</small>	3 tracks	3 tracks
Inclination to vertical <small>(max.)</small>	larger than 20 degree on request	larger than 20 degree on request

### Features

Sky-Frame Fly (Insect screen) on request

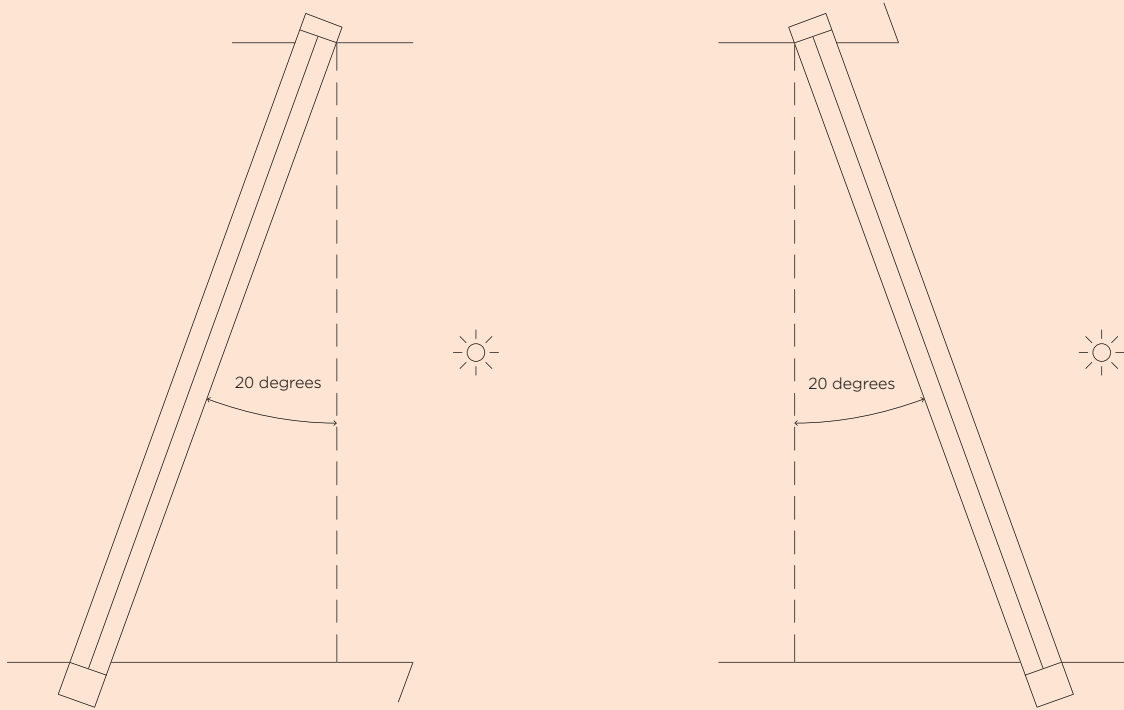
Sky-Frame Automation on request

Connection to alarm system:

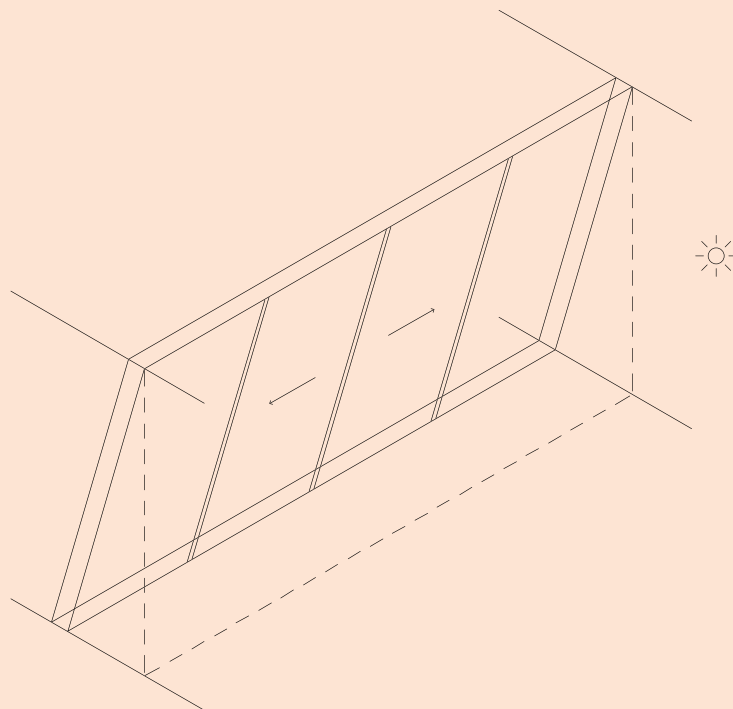
- Position monitoring
- Deadbolt monitoring
- Glass breakage monitoring

\* dependent on inclination

Both inward and outward inclination possible



Example of outward inclination





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# SKY-FRAME 1-3

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## TECHNOLOGY

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The ½” thick single-glazed Sky-Frame 1 units are suitable for applications without thermal insulation requirements. The system incorporates special sliding seals that offer a high level of sound control.

The Sky-Frame 2 units are the most popular system due to the excellent sound and thermal standards met by the specific technology. The slim 1 ⅜” double-glazed insulating glass assembly offers an outstanding performance in a wide range of climate zones.

The Sky-Frame 3 system meets the highest sound and thermal standards. The 2 ⅛” thick triple-glazed panels offer added stability and resistance to wind loads.

# SKY-FRAME 1

## DETAILS + SECTIONS

Characteristics	Sky-Frame 1
Sliding panels <small>(width x height)</small>	<10' 6" x <13' larger on request
Fixed panels <small>(width x height)</small>	<10' 6" x <13' / <13' x <10' 6" larger on request
Single glazing	¼" – ½"
Daylight/glass ratio	98%
Water tightness to driving rain*	up to 8 psf (15 psf with heavy rain device GDE)
Air infiltration*	≥0.06 cfm/ft <sup>2</sup>
Resistance to wind load*	tested up to 50 psf
Sound insulation up to	R <sub>w,P</sub> 37 dB (EN ISO 717-1/EN ISO 10140)
Product ratings*	R-PG30, AW-PG50 (AAMA/WDMA/CSA 101/LS 2/A440-08)

### Features

Sky-Frame Fly (Insect screen)

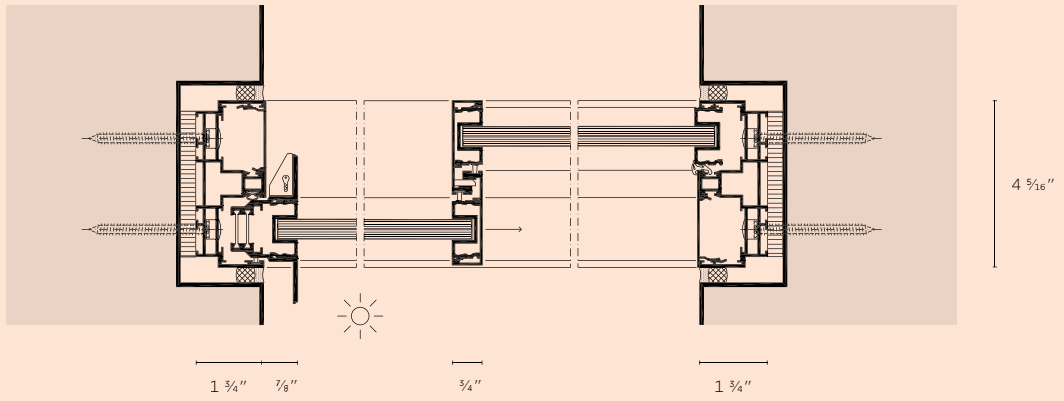
Sky-Frame Automation: single, telescopic (2-6 panels)

Connection to alarm system:

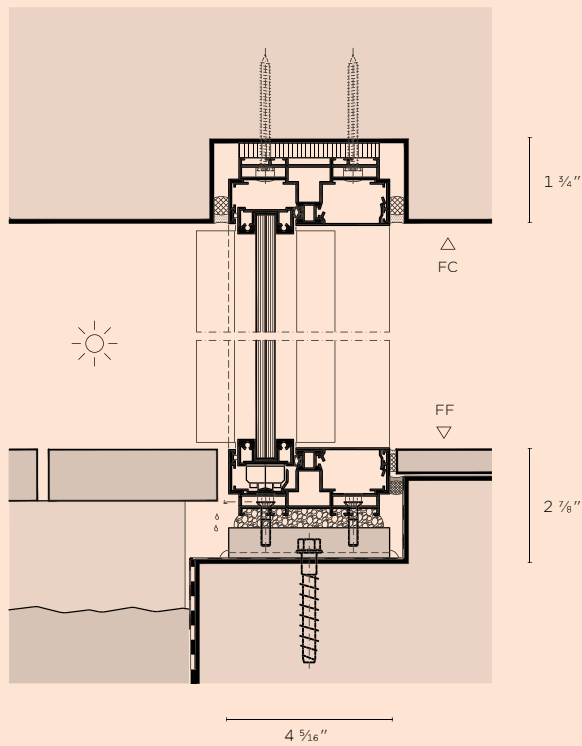
- Position monitoring
- Deadbolt monitoring

\* performances based on Sky-Frame 2

**Horizontal wall section**  
(scale 1:5)



**Vertical floor and ceiling section**  
(scale 1:5)



# SKY-FRAME 2

## DETAILS + SECTIONS

Characteristics	Sky-Frame 2
U-value	0.33-0.35
Sliding panels (width x height)	<7' 6" x <13' larger on request
Fixed panels (width x height)	<8' 6" x <13' / <13' x <8' 6" larger on request
Insulating glass (double glazing)	1 3/16"
Daylight/glass ratio	98%
Water tightness to driving rain	up to 8 psf (15psf with heavy rain device GDE)
Air infiltration	≥0.06 cfm/ft <sup>2</sup>
Resistance to wind load	tested up to 50 psf
Sound insulation up to	R <sub>w,P</sub> 37 dB (EN ISO 717-1/EN ISO 10140)
NFRC	certified (SKY-M-1)
NAMI	certified
Product ratings	R-PG30, AW-PG50 (AAMA/WDMA/CSA 101/I.S.2/ A440-08)

### Features

Sky-Frame Fly (Insect screen)

Sky-Frame Automation: single, telescopic (2-6 panels)

Connection to alarm system:

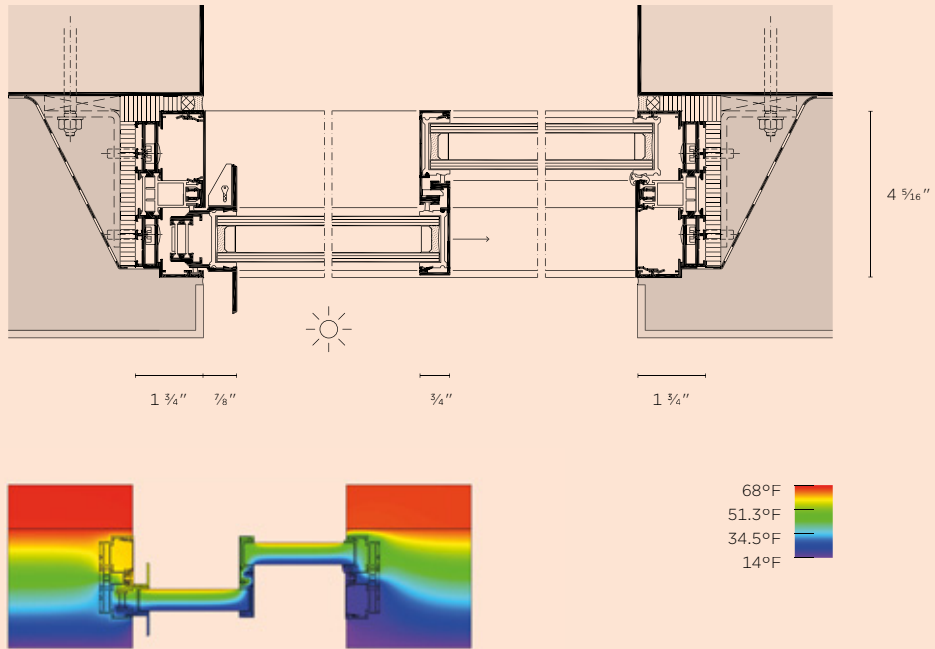
- Position monitoring
- Deadbolt monitoring
- Glass breakage sensor



**Horizontal wall section**

(scale 1:5)

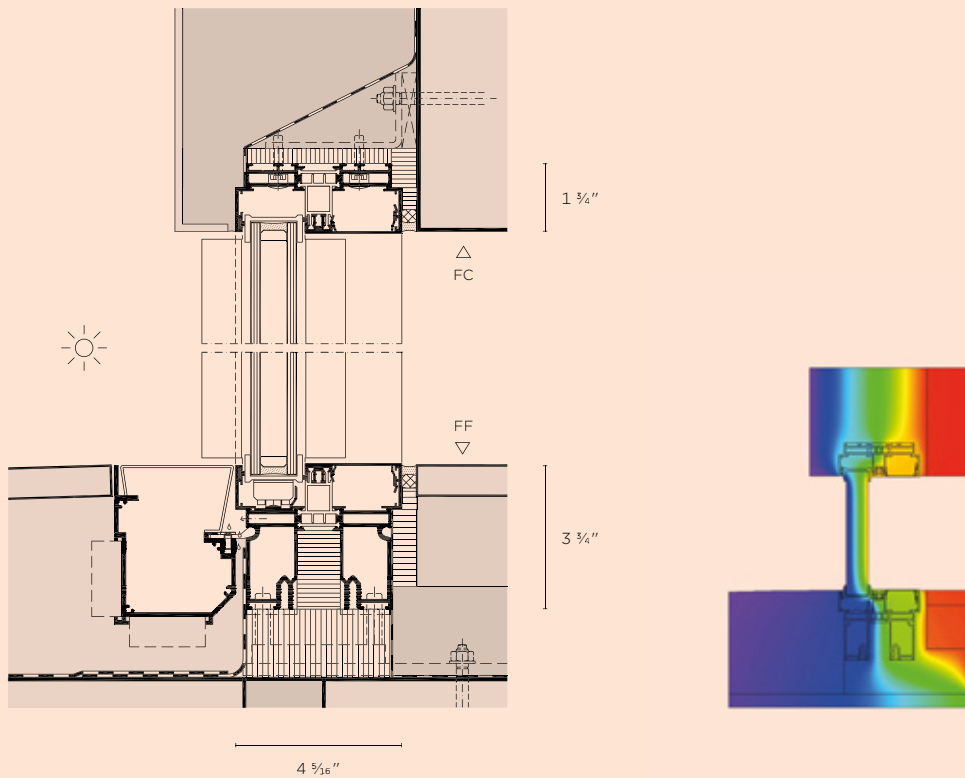
temperature profile (scale 1:10)



**Vertical floor and ceiling section**

(scale 1:5)

temperature profile (scale 1:10)



# SKY-FRAME 3

## DETAILS + SECTIONS

Characteristics	Sky-Frame 3
U-value	0.22 – 0.23
Sliding panels (width x height)	<7' 6" x <13' larger on request
Fixed panels (width x height)	<8' 6" x <13' / <13' x <8' 6" larger on request
Insulating glass (triple glazing)	2 1/8"
Daylight/glass ratio	98 %
Water tightness to driving rain*	up to 8 psf (15 psf with heavy rain device GDE)
Air infiltration*	≥0.06 cfm/ft <sup>2</sup>
Resistance to wind load*	tested up to 50 psf
Sound insulation up to	R <sub>w,P</sub> 44 dB (EN ISO 717-1/EN ISO 10140) OITC 42 dB (ASTM E1332)
NFRC	certified (SKY-M-1)
NAMI	certified
Product ratings*	R-PG30, AW-PG50 (AAMA/WDMA/CSA 101/1.S.2/A440-08)
Hurricane	pending

### Features

Sky-Frame Fly (Insect screen)

Sky-Frame Automation: single, telescopic (2-6 panels)

Connection to alarm system:

- Position monitoring
- Deadbolt monitoring
- Glass breakage sensor

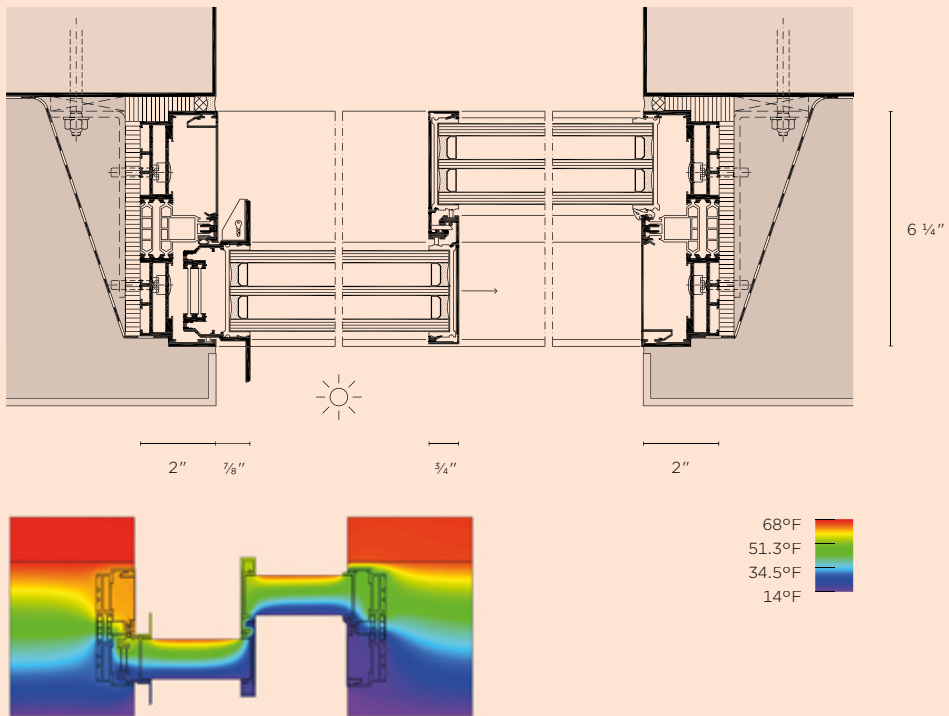


\* performances based on Sky-Frame 2

**Horizontal wall section**

(scale 1:5)

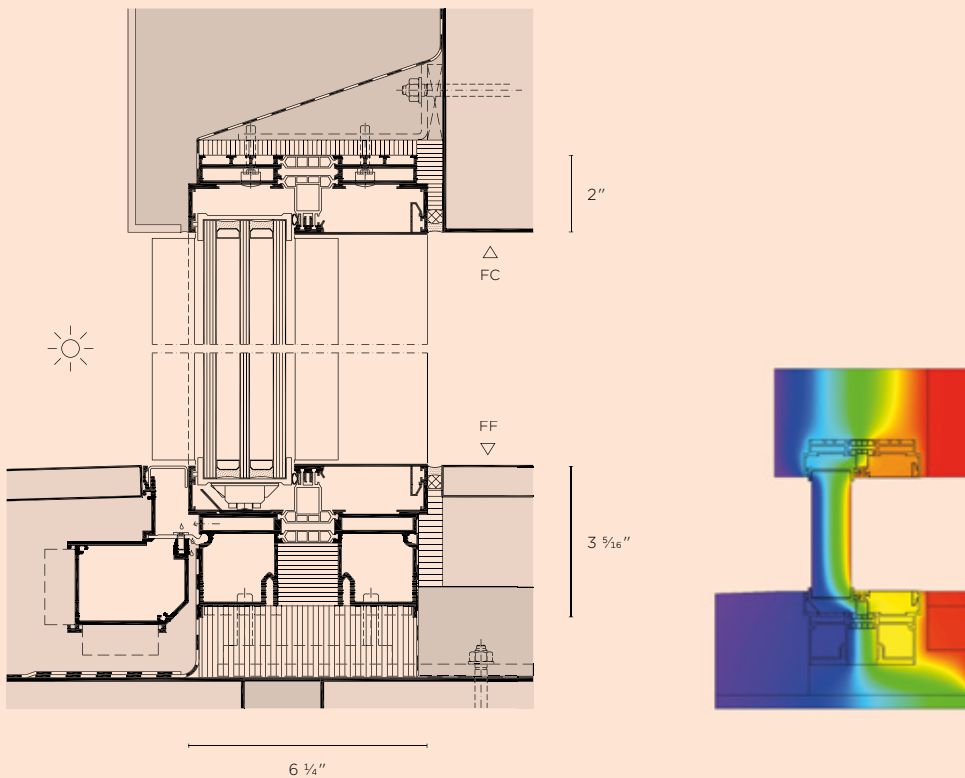
temperature profile (scale 1:10)



**Vertical floor and ceiling section**

(scale 1:5)

temperature profile (scale 1:10)





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# SKY-FRAME FLY

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## FEATURE

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The Sky-Frame Fly insect screen offers a minimal way to keep insects at bay. The frameless, pleated screen fully retracts into the frame when not in use. The combination of tear-resistant Vectran fiber tension cords and an integral system section guarantee maximum stability and weather resistance. Fly extends up to 40 inches.

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# SKY-FRAME FLY

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## DETAILS + SECTIONS

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### Characteristics

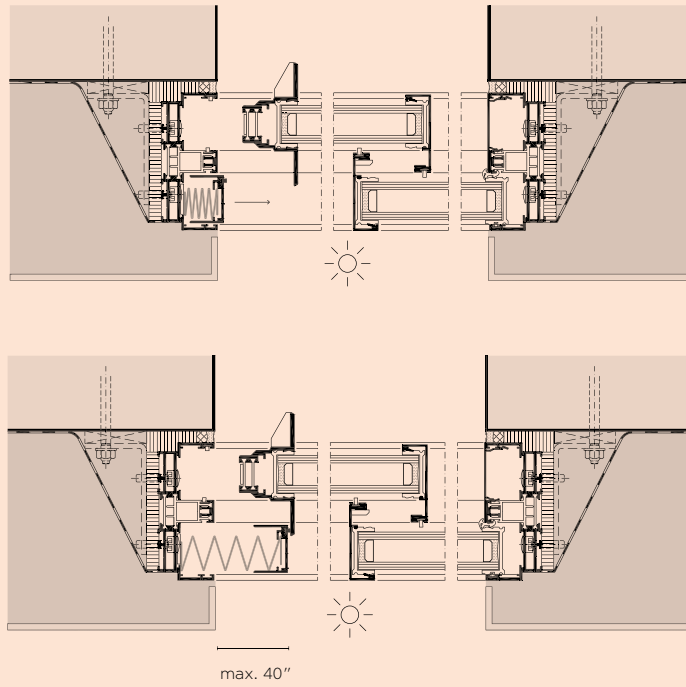
System	Classic, Slope (on request)
Technology	Sky-Frame 1, 2 and 3
Material	Polyester and Vectran
Extends up to max.	40"

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**Horizontal wall section**

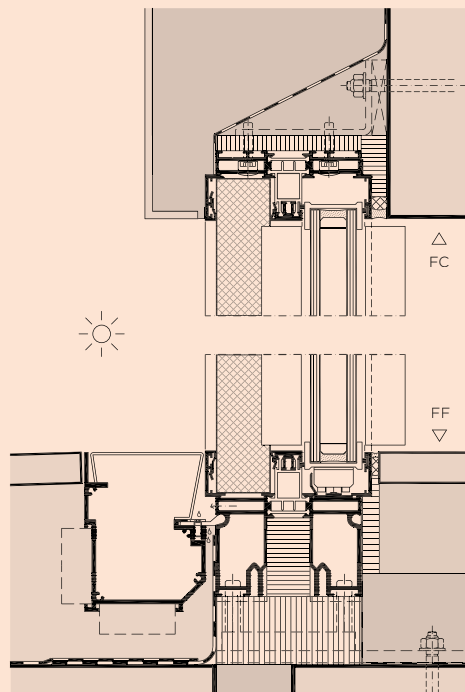
(scale 1:6)

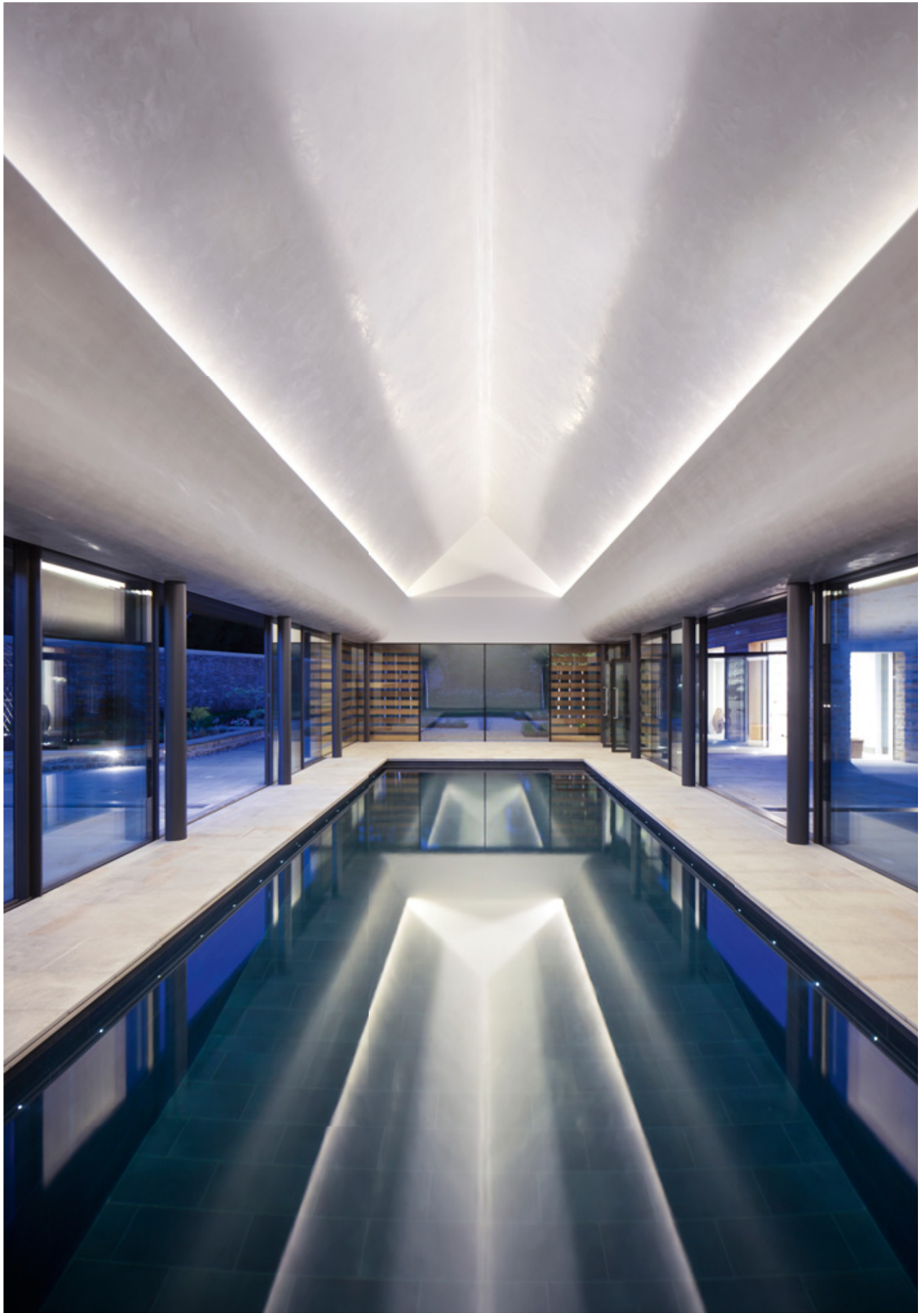
Insect screen in closed and opened position



**Vertical floor and ceiling section**

(scale 1:5)





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# SKY-FRAME AUTOMATION

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## FEATURE

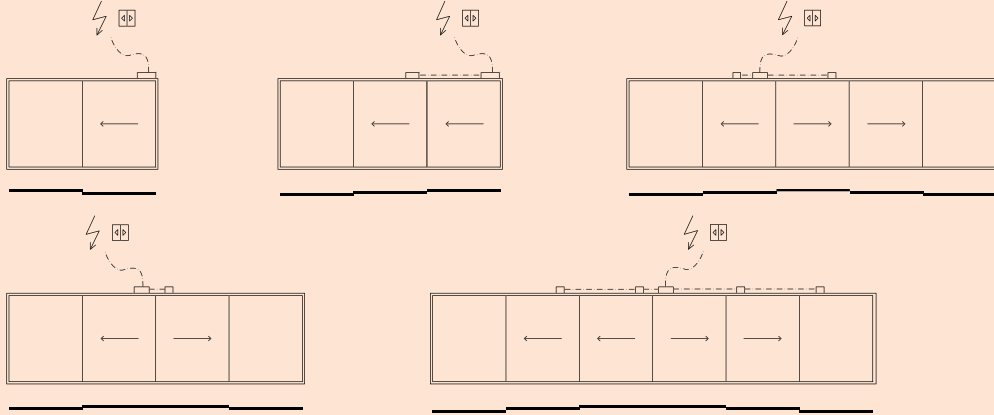
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The electric drive of the Sky-Frame Automation allows for virtually noiseless operation with the press of a button. The drive is concealed in the ceiling section and grants the sliding door panels the ability to move automatically.

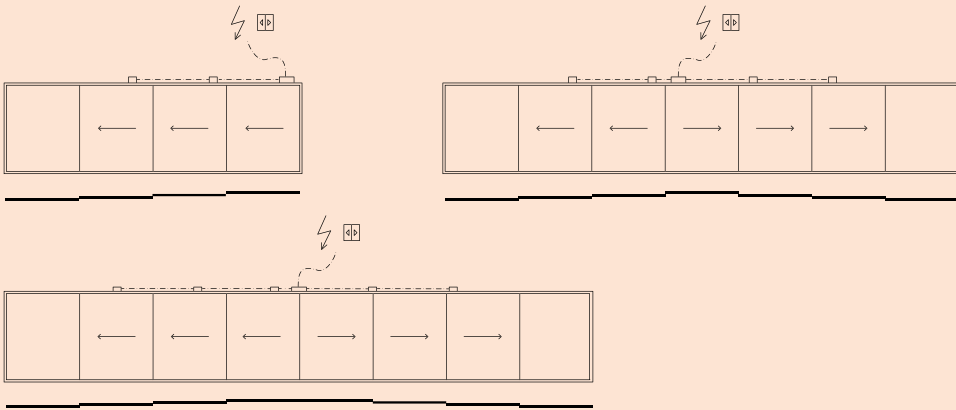
# SKY-FRAME AUTOMATION

## OPENING OPTIONS

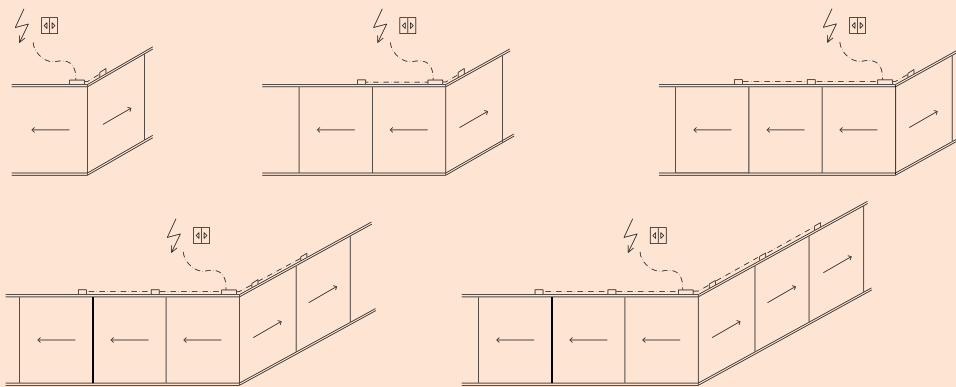
### Single and double telescopic systems



### Triple telescopic systems



### 4-track sliding doors



**Characteristics, Systems and Openings**

- System: Classic (Slope and Arc on request)
- Technology: Sky-Frame 1, 2 and 3
- Panels with automatic drive can also be operated manually
- Electric drive automatically resets panel position after manual operation/handling
- 3-way telescopic systems possible (3+3)
- Concealed in an extremely small space



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# SKY-FRAME GUARD

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## FEATURE

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Sky-Frame Guard offers outstanding burglar resistance to any model via an adhesive bond between the insulating glass assembly and GRP sections, and a multi-point locking system. Various additional components are available to meet further security requirements.

### **Electronic components**

- Position monitoring (panel)
- Deadbolt monitoring (lock)
- Glass breakage sensor (alarm loop)

These three security devices can be electronically monitored by alarm sensors concealed in the section and the status information transmitted to a burglar alarm system.

### **Mechanical components**

- Laminated safety glass
- Additional hardware

The system was tested by ift Rosenheim and meets the following burglar resistance class: RC2 (EN 1628, 1629, 1630/EN 1627).

### **Special information**

The burglar resistance class RC2 is available for Sky-Frame 2 and 3.

# SWISS MADE.



Sky-Frame Headquarters, Switzerland.  
Architecture: Peter Kunz Architektur, Switzerland, 2015.

More than 4500 customers worldwide value the professional advice and individualized planning from the Sky-Frame global network of highly trained specialists provided by an expert distribution partner. Drawing on solid wisdom, these partners provide clients and architects with support from inception to the construction acceptance stage and clarify all questions relating to the installation of Sky-Frame sliding doors.

Sky-Frame achieved its position as the world's leading sliding door system through single-minded commitment coupled with profound technical, architectural and spatial design expertise. The Swiss company continues to set new benchmarks in sliding door technology. Working in tandem with universities and research institutes, it is permanently engaged in the development of innovative solutions.

Remaining true to its brand promise "a view, not a window", Sky-Frame consistently translates visionary ideas into timeless spatial concepts. Several thousand properties across the globe now feature the frameless sliding doors and the company regularly scoops prestigious design and business awards.

The location of development and production operations in Switzerland guarantees compliance with the highest quality standards. Backed up by its international distribution partners, Sky-Frame caters to all customers' requirements.



Sky-Frame Production, Switzerland.



# WE LOVE WHAT WE DO. REFERENCES.



1



2



3



4



5



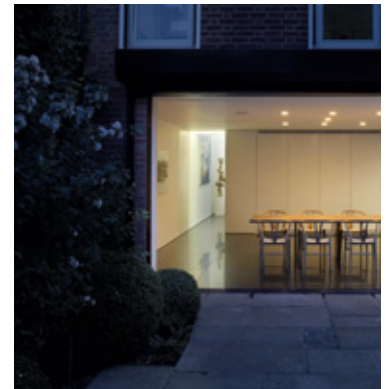
6



7



8



9

1 + 2 Wohnhaus Freundorf, Austria. Architecture: Project A01, Austria. 3 VitraHaus, Germany. Architecture: Herzog & de Meuron, Switzerland.  
4 Villa in Utrecht, Netherlands. Architecture: Zecc Architects BV, Netherlands. 5 Penthouse in New York, USA. Architecture: UNStudio, Netherlands.  
6 Haus G, Germany. Architecture: ATP Sphere, Netherlands. 7 Villa Kavel 01, Netherlands. Architecture: Studioninedots, Netherlands.  
8 2 verandas, Switzerland. Architecture: Gus Wüstemann, Switzerland, Spain. 9 Townhouse in London, UK. Architecture: Found Associates, UK.

**Head Office**

Sky-Frame, Frauenfeld, Switzerland

**Sky-Frame Branches**

USA, Los Angeles  
Austria, Vienna  
Germany, Frankfurt  
Italy, Milan

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Spain  
Sweden  
Switzerland  
Ukraine  
United Kingdom  
USA

For further details, please visit our website:  
[www.sky-frame.com](http://www.sky-frame.com)

**Architecture**

ATP Sphere, Austria (page 8)  
Peter Kunz, Switzerland (page 40, 42/43)  
Stephan Maria Lang, Germany (page 5)  
Lawrence & Long Architects, UK (page 22)  
M3 Architects, UK (page 38)  
Tec Architecture, Switzerland (page 30)  
Yiangou Architects, UK (page 34)  
Luke Zuber, UK (page 3)

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**Concept and Design**

New Identity Ltd., Switzerland

**Text**

Jung von Matt / Public Relations, Switzerland

**Photography**

Iwan Baan, Netherlands (page 44, no.5)  
Tom Bisig, Switzerland (page 44, no.3)  
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Hans Kreye, Germany (page 5)  
Claudia Luperto, Switzerland (page 40, 42/43)  
M3 Architects, UK (page 38)  
George Sharman, UK (page 22)  
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