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## **FAKRO** Facts:



FAKRO started in 1991 in Nowy Sacz, Poland where the idea to manufacture skylights and roof windows was adopted by the company's founder.

- In 1994, the rst FAKRO skylights are delivered to European customers
- In 2000, FAKRO was introduced to the North American market
- The FAKRO Group consists of 12 manufacturing plants
- The FAKRO Group includes 17 distribution centres around the globe
- FAKRO products are available in over 50 countries worldwide
- The FAKRO Group employs over 4,000 people
- The production area is over 2,150,000 sq.ft.
- To date FAKRO has sold over 8,000,000 skylights
- Durrently export sales account for 70% of total FAKRO production and sales
- FAKRO is the world's second largest producer of roof windows and skylights, with approximately 15% of the global market
- FAKRO holds over 100 patents for leading skylight design and innovation
- FAKRO holds over 20 international certicates for quality and designs



FAKRO's 30 year history and pursuit of excellence have earned them a reputation for outstanding quality, workmanship, product durability, and respected corporate values.

During this period FAKRO has focused on becoming the industry's most innovative company.

FAKRO is relentlessly driven to produce state-of-the-art products of the highest quality.











For over 30 years the FAKRO Group has produced European, beautifully designed, technically superior skylights. As the second largest skylight manufacturer in the world they supply 15% of the global market, having sold over 8 million skylights in more than 50 countries, produced in their European manufacturing plants. FAKRO excels in leading Smart Home technology and premium factory lacquered thick wood pressure treated frames, designed to withstand the harshest weather.

Discover the natural beauty of FAKRO's exclusive line of quality skylights.



## **PRODUCT FEATURES**

## THINGS YOU SHOULD KNOW ABOUT FAKRO PRODUCTS

FAKRO skylights and roof windows are designed to provide a focal point for any room, whether you use them individually or in combinations. Their stylish appearance is matched by the highest standard of manufacturing and nishing, which means you can be assured that they will go on looking good for years to come. Our skylights of er a perfect combination of style, sustainability, security and durability. To achieve such high performance involves ongoing refinement and improvement to every skylight and roof window that we design.



## THERMAL INSULATION Lower Utility Bills



One of the most important objectives during the design process of skylights is energy-saving. Use of ENERGY STAR® compliant glass keeps the heat outside during the summer and inside during the winter. It provides energy savings with air conditioning in the summer, and reduces heat loss in the winter.



Many skylights use metallic spacers to separate panes and they can result in condensation by creating a cold 'bridge', decreasing energy savings. By contrast, FAKRO uses warm rubber insulated spacers in order to ensure that this common problem does not a ect our products.



A thick, wooden skylight frame is the best insulator between the inside of the building and the outside. Installation screws hidden inside the frame do not increase the potential of thermal bridges that may be caused by metal anges attached around the frame.



Another feature increasing the insulation properties of FAKRO skylights is the additional perimeter gasket underneath the frame which insulates between the skylight's frame and roof decking.



The additional double gasket system seals the gap between the sash and the frame of the skylight. As a result, the gap is well protected against any air ow seepage.



Optional high performance thermal ashing increases the R-value of the skylight by up to 10%.





#### **DURABILITY Trouble-Free Performance**



Thick wooden frame made of select narrow grain pine, seasoned and vacuum pressure treated.



All wooden elements are factory lacquered before nal assembly.



Frame corners are additionally sealed against any moisture penetration.



Heat and UV reducing glazing unit with an internal gasket system that collects and drains any condensation to the outside.



External cladding covered with durable UV resistant paint.



20 year warranty against sealed unit failure.



#### **EASY INSTALLATION** Time and Cost Saving



A template is supplied that is speci c to the skylight model, for fast and easy marking of the rough opening.



4 to 6 screws drilled through the frame to secure the skylight to the roof deck. Perfect for new builds and retro ts.



Metal pins hold the skylight in place during installation. The elimination of skylight sliding allows for one person installation.



## **PACKAGING**



Strong, durable cardboard box complete with wooden strips at the top and the bottom to protect skylight.



### **SAFETY**

#### Product compliance with building codes and regulations







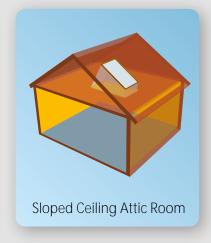


Tested and compliant with CSA requirements.

# HOW TO CHOOSE THE BEST SKYLIGHTS OR ROOF WINDOWS FOR YOUR PROJECT

STEP 1: IDENTIFY YOUR ROOF TYPE WHERE THE SKYLIGHT OR ROOF WINDOW WILL BE INSTALLED







## STEP 2: SELECT THE RIGHT VERSION OF SKYLIGHT OR ROOF WINDOW

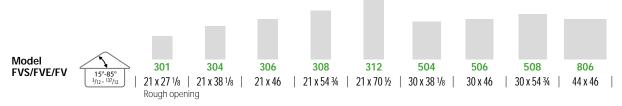
Cathed	ral Ceiling & Sloped	Ceiling	Slop	ed Ceiling Attic Roo	m
	DECK MOUNTE	D	D	ECK MOUNTED	
Electric or Solar	Manual	Fixed	Roof Access	Balcony Window	Top-Hung and Pivot Window
FVE, FVS – deck mounted solar or electric venting skylights are recommended for out of reach applications, where skylight operation with a control rod would not be possible.	FV – deck mounted manual venting skylights are an excellent choice for out of reach installations, and still provides easy access to operate with a control rod or crank handle.	FX – xed skylights are a cost e ective solution to provide natural light. Easy, "bracket free" installation system. No site curb required. Special perimeter gasket for increased insulation.	FWU – roof access windows light up a room, and also provide easy access to the roof for repairs, emergencies, and egress. Available in right or left opening.	FGH-V balcony windows, open to create a beautiful balcony in the loft, expanding your living area, providing views and ventilation. Provides 0° to 45° opening range.	FPP-V top-hung and pivot windows open in two distinct ways: outward from the top and via a center pivot. Automatic air-inlet V40P, providing the ideal amount of air ow into the room.



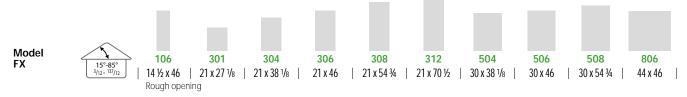
#### STEP 3: CHOOSE A SIZE OF SKYLIGHT OR ROOF WINDOW



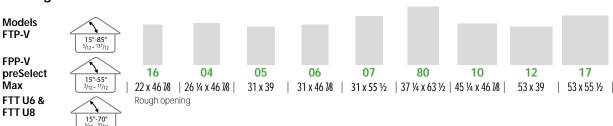
#### **Venting Deck Mount Sizes**



#### **Fixed Deck Mount Sizes**



#### **Venting Deck Mount Pivot Sizes**



	(112 /12)									
		Low Pitched & Flat Roof								
		DECK MOUNTED								
Pivot Window	Thermo Pivot Window	Electric	Manual	Fixed	Roof Access	Fixed				
FTP-V center pivot windows with a 180-degree rotating sash. Automatic air-inlet V40P, provides the ideal amount of air ow into the room.	FTT U6 & FTT U8 Thermo provide exceptional energy savings. Designed for the latest passive building construction. The wider solid wood frame and minimized thermal bridges improve thermal insulation.	DEF – electric venting, superior insulated roof windows for a at and low pitched roof, lling the room below with light. Green roof suitable with the addition of extra XRD base.	pMF – manual venting, superior insulated roof windows for a at and low pitched roof, Iling the room below with light. Green roof suitable with the addition of extra XRD base.	DXF – xed, superior insulated roof windows for a at and low pitched roof, lling the room below with light. Green roof suitable with the addition of extra XRD base.	DRF – insulated, glazed at roof access skylights, providing all the bene ts of natural light. Most sizes open to 80° with gas springs keeping the door in a stable position.	DXW – xed, incredibly strong, insulated, walkable skylight for at roofs, allowing the room below to be lled with light. Special non-slip coating to ensure complete safety.				

# STEP 4: CHECK YOUR ROOF FINISH MATERIAL AND SELECT THE APPROPRIATE FLASHING NECESSARY TO COMPLETE SKYLIGHT OR ROOF WINDOW INSTALLATION



## DECK MOUNTED SOLAR OR ELECTRIC VENTING SKYLIGHT

Solar powered deck mounted skylights are ideal solutions for out of reach applications, where besides the natural light, you can enjoy fresh air. FVS and FVE skylights are equipped with the industry standard Z-Wave radio control system, allowing for easy remote operation and Smart Home integration (for more information see page 28). FVS skylights are powered by the integrated solar panel, which e ciently recharges a fully concealed battery, powering the operating and control system to open and close the skylight. Since it's not connected to a power source, the solar venting skylight will not add to your energy bill.

#### Features:

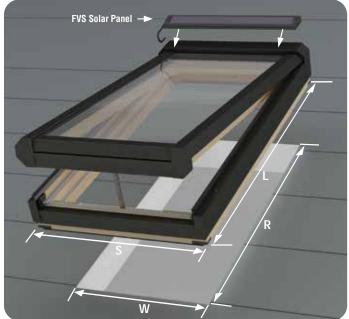
- Suitable for roof pitches between 15-85° degrees.
- Low-emission and heat-re ecting double glazed glass.
- Warm spacer increases condensation resistance.
- Perimeter gasket underneath the frame.
- Double seals between the frame and the sash.
- Internal gasket system to collect and drain any condensation to the outside.
- Insect screen included.
- Blackout (SRF-MV) or light Itering (SRP-MV) blinds available.

- Integrated rain sensors close the skylight automatically.
- Integrated solar panel mounted on the top of the frame for maximum solar collection.
- The included Remote Control allows for easy operation.
   You can also purchase a Wall Keypad.
- The skylight is Z-Wave compatible, allowing for Smart Home system integration (see page 28).
- Solid natural wood construction, providing superior thermal performance and aesthetic beauty.



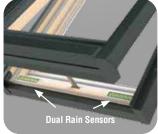












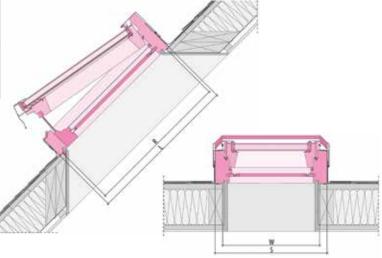
FVS and FVE include two integrated rain sensors that automatically close the skylight at the first sign of rain.





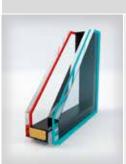


ZRW7 Wall Keypad (optional)



FVS / FVE Speci	cations
Glazing Unit	G31 Tempered-Laminated
SHGC	0.19
U-Factor [BTU/h ft <sup>2</sup> F] (Thermo Flashing)	0.38*
U-Factor [BTU/h ft <sup>2</sup> F] (Regular Flashing)	0.41
VT Visible Transmittance	0.36
CR Condensation Resistance	65
Air In Itration [cfm/ft²]	0.04
Water Penetration [Pa]	730
Uniform Load De ection	45 psf
Uniform Load Structural	+90 psf / - 67.5 psf





#### **G31 Glazing Benefits**

- Glazing Unit G31 Tempered–Laminated
- Single chamber "Solar Factor" glazing unit 4HT Tg14Ar 33.2
- Sunscreen external pane tempered, 0.16" thick
- Internal pane laminated 33.2 PVB (0.25") P2A class as per EN 356, 1(B)1 as per EN 12600
- Warm TGI spacer
- R-Value 5.2 (glass)
- Glazing cavity filled with inert Argon gas

FAKRO FVS & FVE SKYLIGHT DIMENSIONS											
15°-85° 3/12-137/12		H	П	П	П	П	П	П	П	П	
<b>Model</b> Code - VSS, VSE		<b>301</b> (01	<b>304</b> C04	<b>306</b> C06	<b>308</b> C08	<b>312</b> C12	<b>504</b> M04	<b>506</b> M06	<b>508</b> M08	<b>806</b> \$06	
Rough opening (WxR)	in.	21 x 271/8	21 x 381/8	21 x 46	21 x 54¾	21 x 70½	30 x 38%	30 x 46	30 x 54¾	44 x 46	
Outside frame (SxL)	in.	23% x 28	23% x 39	23% x 46%	23% x 55½	23% x 71%	32% x 39	32% x 46%	32% x 55½	46¼ x 46¾	
Daylight area (glass)	sq. ft. m²	2.57 0.22	3.64 0.34	4.54 0.42	5.54 0.51	7.37 0.68	5.62 0.52	7.03 0.65	8.57 0.80	10.91 1.03	





## DECK MOUNTED MANUAL VENTING SKYLIGHT

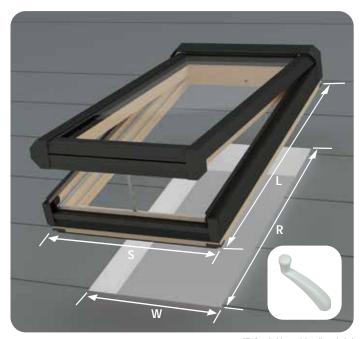
Beautifully transform any upper level room, the FV deck mounted manual venting skylights provide the warmth of natural light and the health bene t of fresh air circulation. The FV is recommended for installation where the skylights will be fairly easy to reach and operate with a window crank handle or control rod. The FV has been the benchmark of venting skylights for years, manufactured to the highest standard in Europe and providing the elegance of factory lacquered solid wood construction.

#### Features:

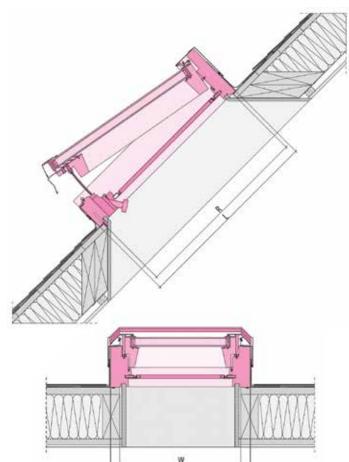
- Suitable for roof pitches between 15-85 degrees.
- Low-emission and heat-re ecting double glazed glass.
- Warm spacer increases condensation resistance.
- Internal gasket system to collect and drain any possible condensation to the outside.
- Perimeter gasket underneath the frame.
- Double seals between the frame and the sash.
- Operated with a crank handle or a control rod.
- Insect screen included.
- Solid natural wood construction, providing superior thermal performance and aesthetic beauty.
- Blackout (SRF-MV) or light Itering (SRP-MV) blinds available.





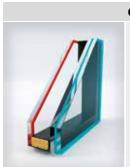






FV Speci ca	FV Speci cations										
Glazing Unit	G31 Tempered-Laminated										
SHGC	0.19										
U-Factor [BTU/h ft <sup>2</sup> F] (Thermo Flashing)	0.38*										
U-Factor [BTU/h ft <sup>2</sup> F] (Regular Flashing)	0.41										
VT Visible Transmittance	0.36										
CR Condensation Resistance	65										
Air In Itration [cfm/ft²]	0.04										
Water Penetration [Pa]	730										
Uniform Load De ection	45 psf										
Uniform Load Structural	+90 psf/-67.5 psf										

<sup>\* 0.38</sup> U-factor qualifies for ENERGY STAR\* with ELA-T or EH/A-AT Flashings



#### **G31 Glazing Benefits**

- Glazing Unit G31 Tempered–Laminated
- Single chamber "Solar Factor" glazing unit 4HT- Tg14Ar-33.2
- Sunscreen external pane tempered, 0.16" thick
- Internal pane laminated 33.2 PVB (0.25") P2A class as per EN 356, 1(B)1 as per EN 12600
- Warm TGI spacer
- R-Value 5.2 (glass)
- Glazing cavity filled with inert Argon gas

FAKRO FV SKYLIGHT DIMENSIONS											
15°-85° 3/12 - 137/12		П	П	П	П	П	П	П	П	П	
<b>Model</b> Size Code - VS		<b>301</b> C01	<b>304</b> C04	<b>306</b> C06	<b>308</b> C08	<b>312</b> C12	<b>504</b> M04	<b>506</b> M06	<b>508</b> M08	<b>806</b> \$06	
Rough opening (WxR)	in.	21 x 271/8	21 x 38%	21 x 46	21 x 54¾	21 x 70½	30 x 38%	30 x 46	30 x 54¾	44 x 46	
Outside frame (SxL)	in.	23% x 28	23% x 39	231/8 x 467/8	23% x 55½	23% x 71%	32½ x 39	321/8 x 467/8	32% x 55½	46¼ x 46%	
Daylight area (glass)	sq. ft. m²	2.57 0.22	3.64 0.34	4.54 0.42	5.54 0.51	7.37 0.68	5.62 0.52	7.03 0.65	8.57 0.80	10.91 1.03	

See recommended ashings on page 16 - 17





## **DECK MOUNTED FIXED SKYLIGHT**

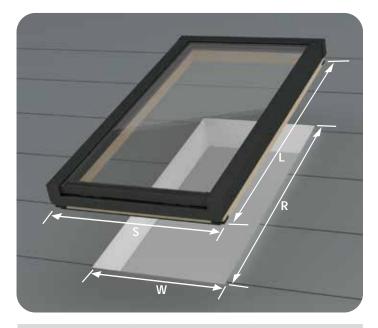
You want to bring a room to life with the beauty and warmth of natural light, while enhancing your home's elegance and sophistication. Our FX deck mounted xed skylight is the perfect choice. Natural light contributes to the livability of your home, adding comfort, functionality and positively impacting your health and mental well-being. Our most popular skylight for years, the FX is a proven leader in skylight design, manufactured to the highest standard in Europe and providing the elegance of factory lacquered solid natural wood construction.

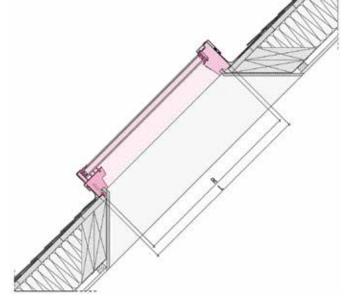
#### Features:

- Suitable for roof pitches between 15-85 degrees.
- Low-emission and heat-re ecting double glazed glass.
- Warm spacer increases condensation resistance.
- Perimeter gasket underneath the frame.
- Internal gasket system to collect and drain any possible condensation to the outside.
- Solid natural wood construction, providing superior thermal performance and aesthetic beauty.
- Blackout (SRF-MX) or light Itering (SRP-MX) blinds available.

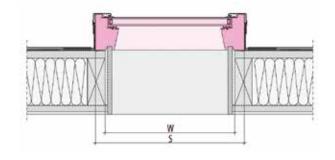








	FX Speci cations	
Glazing unit	G3 Tempered-Tempered	G31 Tempered-Laminated
SHGC	0.21	0.21
U-Factor [BTU/h ft²F]	0.39*	0.39*
VT Visible Transmittance	0.41	0.40
CR Condensation Resistance	65	65
Air In Itration [cfm/ft²]	0.02	0.02
Water Penetration [Pa]	730	730
Uniform Load De ection	125 psf	125 psf
Uniform Load Structural	+250 psf / -187.5 psf	+250 psf / -187.5 psf



## **G3 Glazing**



- Glazing Unit G3 Tempered-Tempered
- Single chamber "Solar Factor" glazing unit 4HT Tg16Ar 4H
- Sunscreen external pane tempered, 0.16" thick
- Internal pane tempered, 0.16" thick
- Warm TGI spacer
- R-Value 5.7 (glass)
- Glazing cavity filled with inert Argon gas

#### **G31 Glazing**

- Glazing Unit G31 Tempered-Laminated
- Single chamber "Solar Factor" glazing unit 4HT—Tg14Ar 33.2
- Sunscreen external pane tempered, 0.16" thick
- Internal pane laminated 33.2 PVB (0.25") P2A class as per EN 356, 1(B)1 as per EN 12600
- Warm TGI spacer
- R-Value 5.2 (glass)
- Glazing cavity filled with inert Argon gas

FAKRO FX SKYLIGHT DIMENSIONS											
15°-85° 3/ <sub>12</sub> - <sup>137</sup> / <sub>12</sub>		П	П	П	П	П	П	П	П	П	
<b>Model</b> Size Code - FS		<b>106</b> A06	<b>301</b> (01	<b>304</b> (04	<b>306</b> C06	<b>308</b> C08	<b>312</b> C12	<b>504</b> M04	<b>506</b> M06	<b>508</b> M08	<b>806</b> S06
Rough opening (WxR)	in.	14½ x 46	21 x 27%	21 x 38%	21 x 46	21 x 54¾	21 x 70½	30 x 38%	30 x 46	30 x 54¾	44 x 46
Outside frame (SxL)	in.	16% x 46%	23% x 28	23½ x 39	23% x 46%	23% x 55½	23% x 71%	32% x 39	32½ x 46½	32% x 55½	46¼ x 46%
Daylight area (glass)	sq. ft. m²	3.46 0.32	2.92 0.27	4.31 0.40	5.30 0.49	6.39 0.59	8.39 0.78	6.46 0.60	7.94 0.74	9.58 0.89	12.09 1.12

<sup>\* 0.39</sup> U-factor qualifies for ENERGY STAR\* with EL, EL-T, EH-A, EH-AT Flashings



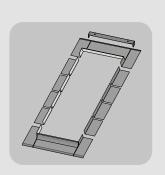
## FLASHINGS FOR DECK MOUNTED SKYLIGHTS





EL ashing is suitable for skylights installed with at roong materials, such as shingles, plain-tile, double-lap roong or slates. The side elements of the ashing are laid alternately with the roong material (maximum roong material thickness 5/16") for superior performance. The bottom section of the ashing is equipped with a butyl strip to protect against wind driven rain or snow in stormy conditions.

EL – ashing for use with FX, FV, FVE, FVS deckmounted only.





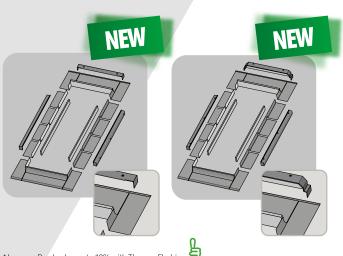
## EL-T THERMO, ELA-T THERMO

EL-T Thermo and ELA-T Thermo Flashings are a new product in the FAKRO range that provides superior integration with an insulated roof. These ashings help eliminate "cool areas" that sometimes occur between the roof deck and skylight causing condensation on the interior drywall.

The underside of the Thermo Flashing has a exible insulating material, creating a barrier by tightly sealing the skylight frame. FAKRO's Thermo Flashing works well in combination with insulated roofs and is especially recommended in cold regions\*.

Skylights used in conjunction with the FAKRO Thermo Flashing system are ENERGY STAR® certi ed.

EL-T – ashing for use with FX skylights only. ELA-T – ashing for use with FV, FVE, FVS skylights only.







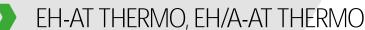


## **EH-A**

EH-A is the ideal ashing for pro led and high-pro led corrugated materials, bonding the skylight with roo ng materials such as tiles, corrugated and standing seam metal sheets.

A wider and longer lower section allows a tighter joint with the high pro led roo ng material (the height of the pro le 1¼ "to 3½"). A butyl strip holds down the bottom section of the ashing.

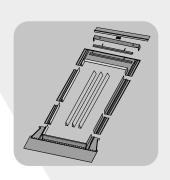
EH-A – ashing for use with FX, FV, FVE, FVS deck mounted skylights only.



EH-AT Thermo and EH/A-AT Thermo ashings are new products in FAKRO's range. This innovative ashing provides a better insulated connection with the skylight frame and roof decking. Additionally, it minimizes thermal bridges and condensation. The underside of the Thermo ashing has a exible insulating material, creating a barrier by tightly sealing the skylight frame. FAKRO's Thermo ashing works well in combination with insulated roofs and is especially recommended in cold regions\*.

Skylights used in conjunction with the FAKRO Thermo Flashing system are ENERGY STAR® certi ed.

EH-AT – ashing for use with FX skylights only. EH/A-AT – ashing for use with FV, FVE, FVS skylights only.







## DECK MOUNTED **BALCONY WINDOW**

## **FGH-V Galeria**

FGH-V Galeria is an innovative deck mounted window design, where the sash opens to create a balcony, maximizing the livability of a loft. The upper top hung sash opens upwards to 45°, supported by an integrated auxillary mechanism which allows the upper sash to open in any position within this range. Whereas, the lower sash can be tilted vertically to 90°, allowing easy access to the balcony. The balcony sash can be hinged and locked in any position from closed to vertically upright. The upper sash can be opened and locked from closed to 45°. For safety, side railings are integrated into the bottom sash and automatically expand during opening. When the lower sash is closed, the balcony railings are hidden inside the window profiles, unlike competitive models.



#### Features:

- Suitable for roof pitches between 35-55 degrees.
- Energy e cent triple pane Low E Krypton P5 Tempered/Tempered/Laminated glazing unit.
- Premium narrow grain natural pine frame, pressure treated and factory laquered.
- System of reinforced window structure **topSafe**
- Opening safety restrictor.
- Roof slope required at time of ordering to ensure correct railings are provided.
- Flashing and underlayment sold separately.
- Includes automatic air inlet V40P, providing the ideal amount of air ow into the room, even when closed (see page 20).
- Top sash rotates inward for easy cleaning from the inside.



The upper sash can be raised smoothly up to an angle of 45°. Side safety railings are integrated into the bottom sash and they tilt forward when the sash is opened.

Installation of balcony windows should only be performed by a quali ed professional.

When closed, the balcony railings are hidden from view in the window pro les, so they do not collect dirt and spoil the aesthetics of the roof, unlike competitive models.



FGH-V balcony windows require special ashings: ELV/G for shingles and EHN/G for pro led roo ng materials (tiles).

FGH-V Sp	eci cations
Glazing Unit	P5 (Temp-Temp-Lam)
Window U-Value (W/m <sup>2</sup> .K)	1.1
Glazing U-Value (W/m².K)	0.5
Inert gas lled panes	Krypton
Light transmittance factor	0.68
Solar factor	0.48
Air permeability class	Class 3 as per EN 1026, EN 12207
Impact resistance	Class 3 (450mm) as per EN 13049

#### **FAKRO BALCONY WINDOW FGH-V DIMENSIONS** 35°-55 Model 30/100 37/100 Size Code MK19 PK19 Rough opening 31½ x 101 38¾ x 101 (WxR) Outside frame 36% x 100% in 30% x 100% (SxI) Daylight area sq. ft. 14.21 17.98 1.32 1.67 (glass)

## **P5 Glazing Benefits**

- Glazing Unit P5 Tempered Tempered Laminated
- Double chamber glazing 4HS − 10 − 4HT − 8 − 33.2T
- External tempered pane with easy maintenance layer
- Centre pane Low Emission tempered
- Internal pane Low Emission laminated PVB Class P2A according to standard EN 356
- Warm TGI spacer
- U-Value 0.5 (glass)
- Glazing cavity filled with inert Krypton gas



# DECK MOUNTED TOP HUNG AND PIVOT ROOF WINDOW

## FPP-V preSelect Max

The FPP-V preSelect MAX top hung and pivot window is our latest innovation, allowing the window to open from the top and centre. The sash can be opened up to 45°, which is nearly 30% more than the previous model. This signicant improvement creates more usable space within the room. Two independent patented opening mechanisms ensure the complete stability of the sash in both opening positions. This increases the window's durability and makes it safer to operate.

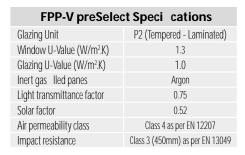




FPP-V roof windows require a special ashing ELN for shingles and EHN-A for high pro led roo ng materials (metal and tile roofs).



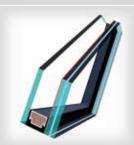
FAKRO's preSelect switch to convert the window from tophung to centre pivot.





V40P vent allows for air ow when closed.

#### **P2 Glazing Benefits**



- Glazing unit P2 Tempered Laminated
- Single chamber glazing 4HS Tg14Ar 33.2T
- Offers increased resistance against breakage
- External tempered pane with easy maintenance layer
- $\bullet$  Internal pane Low Emission laminated PVB Class P2A according to standard EN 356
- Warm TGI spacer
- U-Value 1.0 (glass)
- Glazing cavity filled with inert Argon gas



#### Features:

- The window is double-glazed as standard and by using a single chamber construction with energy saving panes, each glazed unit achieves a U Value = 0.18 BTU/hft<sup>2</sup>F.
- An ideal solution for attic or loft room, incorporating European design.
- The pivot function enables the sash to be rotated through 180° and locked when cleaning the outer pane.
- Unique opening mechanism can be changed using the preSelect sliding switch located in the middle of the frame, converting the window from top hung to centre pivot.
- Includes automatic air-inlet V40P, providing the ideal amount of air ow into the room.
- Premium narrow grain natural pine frame, pressure treated and factory lacquered.
- Internal gasket system to collect and drain any possible condensation.
- Energy e cient Low E argon P2, tempered / laminated glazing unit.
- Flashing and underlayment sold separately.
- Blackout (ARF) or light ltering (ARP) blinds available.
- Mosquito screens (AMS) available.

FAKRO TOP HUNG AND PIVOT WINDOW FPP-V PRESELECT MAX DIMENSIONS											
15°-55° 3/12-17/12											
<b>Model</b> Size Code		<b>16</b> CK06	<b>04</b> FK06	<b>05</b> MK04	<b>06</b> MK06	<b>07</b> MK08	<b>80</b> PK10	<b>10</b> SK06	<b>12</b> UK04	<b>17</b> UK08	
Rough opening (WxR)	in.	22 x 46%	26¼ x 46%	31 x 39	31 x 46%	31 x 55½	37¼ x 63½	45¼ x 46 %	53 x 39	53 x 55½	
Outside frame (SxL)	in.	21½ x 46½	25% x 46½	30¼ x 385⁄8	30¼ x 46½	30¼ x 55	36% x 63	44¾ x 46 ½	52% x 38%	52% x 55%	
Daylight area (glass)	sq. ft. m²	5.38 0.50	6.67 0.62	6.67 0.62	8.07 0.75	9.80 0.91	13.89 1.29	12.38 1.15	12.06 1.12	17.65 1.64	





#### Features:

- The window is double-glazed and uses a single chambered pane construction to save energy.
   Each glazed unit achieves a pane U Value = 0.19 BTU/hft²F.
- Manufactured using high quality edge grain natural European pine, impregnated and nished with two coats of acrylic lacquer.
- Handle positioned on the lower part of the sash for ease of use.
- Able to be xed in two open positions, allowing for improved air circulation.
- Suitable for roofs with pitches between 15 to 85 degrees.
- Internal gasket system to collect and drain any possible condensation.
- Energy e cient, LoE argon P2 tempered/ laminated.
- Flashing and underlayment sold separate.
- Including automatic air inlet V40P providing the ideal amount of air ow into the room.
- Blackout (ARF) or light Itering (ARP) blinds available.
- Mosquito screens (AMS) available.
- Z-Wave solar or hard wired electric versions available by special order.



## DECK MOUNTED PIVOT WINDOW

### FTP-V

The FTP-V centre pivot window is the most popular FAKRO roof window sold in Europe. The innovative center pivot allows the sash to open in a range of positions, increasing the amount of fresh air which can be drawn into the room. The sash can also be rotated 180° and locked, allowing for easy and safe cleaning of the outer pane and operated using a two-part hinge. Get the advantage of improved air ow circulation, even when the window is closed, through the automatic air inlet V40P located on the top of the window's frame. When opened, the inlet will automatically adjust the size of the air ow channel to provide an optimum amount of air into the room, ensuring a healthy environment and energy savings.



## Automatic V40P air inlet used in FAKRO windows is of unique design:

The air inlet channel is designed so hot air avoids contact with the cooling e ect of the colder aluminium. As a result there is no water vapour condensation (however, condensation may occur when the gravitationally activated inlet vent is not working properly).

The air inlet design and construction provides excellent thermal and acoustic values.



The air inlet provides outstanding air Itration, keeping dust out of the room.

FTP-V P2 S	peci cations
Glazing Unit	P2 (Tempered - Laminated)
Window U-Value (W/m <sup>2</sup> .K)	1.3
Glazing U-Value (W/m².K)	1.0
Inert gas lled panes	Argon
Light transmittance factor	0.70
Solar factor	0.52
Air permeability class	Class 4 as per EN 1026, EN 12207
Impact resistance	Class 3 (450mm) as per EN 13049



#### **P2 Glazing Benefits**

- Glazing Unit P2 Tempered Laminated
- Single chamber glazing 4HS Tg14Ar 33.2T
- Offers increased resistance against breakage
- External tempered pane with easy maintenance layer
- Internal pane Low Emission laminated PVB Class P2A according to standard EN 356
- Warm TGI spacer
- U-Value 1.0 (glass)
- Glazing cavity filled with inert Argon gas

FAKRO PIVOT V	FAKRO PIVOT WINDOW FTP-V DIMENSIONS										
15°-85° 3/12 - 137/12		П	П	П	П	П	П	П			
<b>Model</b> Size Code		<b>16</b> CK06	<b>04</b> FK06	<b>05</b> MK04	<b>06</b> MK06	<b>07</b> MK08	<b>80</b> PK10	<b>10</b> SK06	<b>12</b> UK04	<b>17</b> UK08	
Rough opening (WxR)	in.	22 x 46%	26¼ x 46%	31 x 39	31 x 467/8	31 x 55½	37¼ x 63½	45¼ x 46%	53 x 39	53 x 55½	
Outside frame (SxL)	in.	21½ x 46½	25% x 46½	30¼ x 38%	30¼ x 46½	30¼ x 55	36% x 63	44¾ x 46½	52% x 38%	52% x 55%	
Daylight area (glass)	sq. ft. m²	5.38 0.50	6.67 0.62	6.67 0.62	8.07 0.75	9.80 0.91	13.89 1.29	12.38 1.15	12.06 1.12	17.65 1.64	



## DECK MOUNTED THERMO WINDOW

## FTT U6 & FTT U8 THERMO

The innovative FTT Roof Window provides our best energy saving insulation, delivering an excellent overall heat-transfer rating. The window functions as an eccient system, from the glazing, to the frame, to the ashing. Ideal for Passive House construction, and is available in two versions: FTT U6 and FTT U8 Thermo. The glazing is set in a specially designed thicker natural wood frame with wider prole than standard windows, working in unison with thermal insulation to minimize thermal bridges.



FTT U6
Triple Glazed. High energy e cient glazing unit U6.

FTT U6 Speci cations					
Glazing Unit	U6 (Temp/Temp/Lam)				
Window U-Value (W/m <sup>2</sup> .K)	0.8				
Glazing U-Value (W/m².K)	0.5				
Inert gas lled panes	Argon				
Light transmittance factor	0.62				
Solar factor	0.47				
Air permeability class	Class 4 as per EN 12207				



#### FTT U8-VSG Thermo

Quad Glazed. Passive U8 glazing unit. The most e cient roof window available., supplied with EHV-T Thermo Flashing.

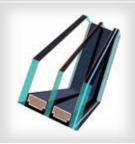
FTT U8 Speci cations						
Glazing Unit	U8 (Temp/Temp/Temp/Lam)					
Window U-Value (W/m <sup>2</sup> .K)	0.58					
Glazing U-Value (W/m².K)	0.3					
Inert gas lled panes	Krypton					
Light transmittance factor	0.57					
Solar factor	0.43					
Air permeability class	Class 4 as per EN 12207					
Impact resistance	Class 3 (450mm) as per EN 13049					

#### Features:

- The FTT features a centre pivot with a raised axis of rotation. Creating space and the ability to stand comfortably under the window.
- Sash frame is engineered to be thicker than standard windows and signic antly increases durability and the thermo-insulation.
- The innovative closing mechanism locks the sash from both sides of the frame.
- Best-in-class sound insulation.
- Sash can be held open anywhere along the 0 to 45 degree opening.
- FTT U8 is the only quad glazed venting roof window with Krypton gas for extreme climates.
- Blackout (ARF) or light Itering (ARP) blinds available. XGP overlay required for blind installation on all FTT models.
- Mosquito screens (AMS) available.
- Z-Wave solar or hard wired electric versions available by special order.

#### **U6 Glazing High Energy Efficient Benefits**

Class 3 (450mm) as per EN 13049



Impact resistance

- Double chamber glazing 6HT Tg18Ar 4H Tg18Ar — 33.2T
- Three panes: external toughened pane, internal toughened with low emission layer and inner (consists of two panes with 0.76mm (2x0.38mm) layer of PVB plastic membrane between them) laminated anti-burglary glass P2A
- The unit has two warm TGI spacers
- The chamber cavities are filled with inert Argon gas



#### **U8-VSG Glazing Passive Energy Benefits**

- Triple chamber glazing 4H Tg12Kr 4HT— Tg12Kr — 4HT — Tg12Kr — 33.2T
- It has three low emission layers and warm TGI spacers. Inner laminated anti-burglary glass P2A.
- The 12mm chamber cavities between the panes are filled with inert Krypton gas

#### **FAKRO FTT U6 & FTT U8 THERMO DIMENSIONS** Model 16 04 05 06 07 80 10 12 17 Rough opening 22 x 46% 26¼ x 46% 31 x 39 31 x 46% 31 x 551/2 37¼ x 63½ 45¼ x 46% 53 x 55½ in. 53 x 39 (WxR) Outside frame 52% x 55% 21½ x 46½ 25% x 461/2 301/4 x 385/8 301/4 x 461/2 30¼ x 55 36% x 63 44¾ x 46½ 52% x 38% in. (SxL) Daylight area 5.38 6.67 6.67 8.07 9.80 13.89 12.38 12.06 17.65 sq. ft. (glass) 0.50 0.62 0.75 0.91 1.29 1.15 1.64 0.62 1.12





## DECK MOUNTED ROOF ACCESS WINDOW

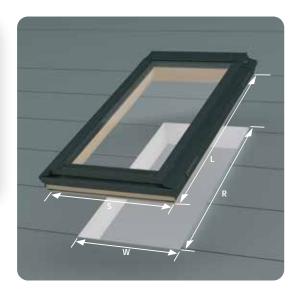
## **FWU Egress**

Our FWU egress windows will not only light up a room, but they also provide easy access to the roof, or a way of escape in case of emergency. FWU roof access windows are designed for rooms where building codes require two methods of escape. We recommend that you install the FWU roof access windows as an egress roof window for safety and building code compliance. The roof access window is available in two versions: right opening FWU-R or left opening FWU-L (pictured). FWU size 24/46 windows are o cially recognized as a certilled **Fire Exit roof window (egress window\*)** and can help save lives in case of emergencies such as a relor ood.





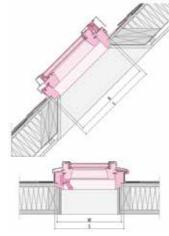




#### Features:

- Suitable for roof pitches between 15 to 55 degrees.
- Low-emission and heat-re ecting double glazed glass.
- Opening handle positioned halfway up the sash for ease of use.
- Internal gasket system to collect and drain any possible condensation to the outside.
- Recquires special ashing ELW or EHW.
- Manufactured using high quality edge grain natural European pine, impregnated and nished with two coats of acrylic lacquer.
- Factory nished aluminum frame.
- Retractable insect screen available.
- Bracket free installation no metal connections on exterior.

FWU Speci cations					
Glazing unit	G31 Tempered - Laminated				
SHGC	0.20				
U-Factor [BTU/h ft <sup>2</sup> F]	0.41				
VT Visible Transmittance	0.37				
CR Condensation Resistance	54				
Air In Itration [cfm/ft <sup>2</sup> ]	0.18				
Water Penetration [Pa]	730				
Uniform Load De ection	20.1 psf/-20.1 psf				
Uniform Load Structural	60 psf/-60 psf				
Uniform Load Structural	60 psf/-60 psf				



FAKRO SIDE HUNG WINDOW FWU DIMENSIONS				
15°-55° 3/12-17/12		п	П	П
Model		24/38	24/46	37/46*
Rough opening (WxR)	in.	22¼ x 37¾	22¼ x 45¼	38½ x 47¾
Outside frame (SxL)	in.	23½ x 38%	23½ x 46¼	36% x 46¼
Daylight area (glass)	sq. ft. m²	3.55 0.33	4.52 0.42	10 0.93

<sup>\*</sup>Installs with mounting brackets.



#### G31 Glazing Benefits

- Glazing Unit G31 Tempered Laminated
- Single chamber "Solar Factor" glazing unit 4HT—Tg14Ar 33.2
- Sunscreen external pane tempered, 0.16" thick
- Internal pane laminated 33.2 PVB (0.25") P2A class as per EN 356, 1(B)1 as per EN 12600
- Warm TGI spacer
- R-Value 5.2 (glass)
- Glazing cavity filled with inert Argon gas

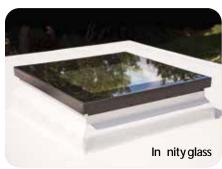
## FLAT ROOF ACCESS SKYLIGHT

## **DRF**

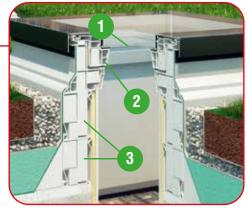
We are proud to o er this innovative new product, the DRF insulated roof access skylight joins our existing range of FAKRO at roof solutions. In addition to acting as a skylight, it has the extra bene t of providing safe and convenient access to a at roof. Speci cally designed hinges and opening system allow for easy sash opening up to 80 degrees (except sizes 36"x48" and 48"x48" open to 60°). Gas springs aid with the ease of opening and keep the sash in a secure open position, eliminating the risk of accidental closing. The DRF can be adapted with a second XRD/W base frame for the installation in a green or living roof, and higher skylight curb.











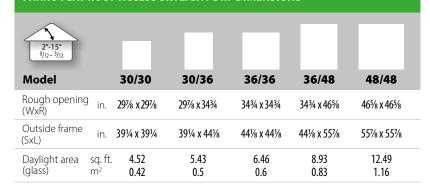
- DU6 triple-pane glazingMulti-chamber PVC profiles filled with insulating material
- 3 Additional XRD/W bases available for installation in green or living roofs

#### **DU6 Glazing Benefits**



- Glazing Unit DU6 Tempered Tempered Laminated
- Double Chamber Glazing 6H-18-4HT-18-44.2T / 6H-16-4HT-18-55.2T for sizes from 48x48
- Outer pane Anti-slip tempered laminated
- Centre pane Low Emission tempered
- Internal pane Low Emission laminated PVB Class P2A according to standard EN 356
- · Warm TGI spacer
- U-Value 0.5 (glass)
- Glazing cavity filled with inert Argon gas

#### FAKRO FLAT ROOF ACCESS SKYLIGHT DRF DIMENSIONS





#### Features:

- In nity glass top surface, up to 16% greater glazing area compared to competitive o erings.
- An ideal solution for easy and secure access to a at roof, with the bene t of natural light.
- Roof access door with patented hinges and gas springs opens to 80 degrees keeping the door stable in the open position.
- The frame of the at roof skylight is constructed of multi-chamber PVC pro les lled with highly rated insulation. The upper part of the DRF roof access skylight comes with an innovative at glazing unit.
- The DRF roof access skylight is an energy-e cient, DU6 triple glazed with a Class P2A anti-burglary inner pane (EN14351-1:2006+A2:2016) and a whole window U-value = 0.13 BTU/h ft² F R-value = 7.7.
- Windows can also be mounted on an additional XRD/W base, providing a height of 5 <sup>7</sup>/8" (15cm), suitable for the installation in a green or living roof, and higher skylight curb.
- Designed for pitches between between 2 and 15 degrees.
- Featuring a triple glazed DU6 glazing unit, Tempered/Tempered/Laminated.
- Blackout (ARF-D) blinds available.

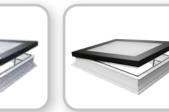
# BTU/hft2F **U-value** Tor U8, triple chamber DEF, DMF & DXF skylights

Featuring In nity glass edge.

Flat roof windows are available in three versions.

**DEF** Electric Venting with

wireless radio system for Smart Home applications



**DMF** Manual Venting.

**DXF** Fixed

are manufactured with

outstanding thermal

insulation.

## DECK MOUNTED SKYLIGHT FOR A FLAT ROOF

## DEF, DMF, DXF

The DEF, DMF & DXF skylights are engineered to provide natural light and fresh air ventilation for at roof buildings where standard vertical windows are not possible. This technologically advanced skylight dramatically improves the environment of the people living or working below. The high-performance design incorporating the highest level of thermal insulation resulting in energy saving. The DEF, DMF and DXF can be adapted with a second XRD base frame for the installation in a green or living roof, and higher skylight curb.

The frame is designed with a unique pro led covering under the drip cap, dramatically improving the water seal and connection with the roo ng material.

Now every room under a at roof can be ooded with warm natural light and fresh air.

More economical DEG, DMG, DXG-P2 (Temp/ Laminated) version also available by special order.



Rain Sensor.



Installation Base XRD.

#### Features:

(solar or wired).

- In nity glass top surface, up to 16% greater glazing area compared to competitive o erings.
- Suitable for roofs with pitches between 2 and 15 degrees.
- Innovative glazing unit featuring leading edge design.
- Perfect solution for energy e cient passive buildings.
- Available with two glazing units: DU6 (triple-glazed) and DU8 (quadruple-glazed). Both are hermetically sealed units.
- Excellent thermal insulation parameters for the entire quadruple glazed (DU8) skylight with an R-value of 8.9. Triple glazed (DU6) skylight has an R-value of 8.1.
- Sound value: 38 dB for DU6 and 37 dB for DU8.
- Can be used with roo ng products such as TPO, PVC, EPDM single ply or torched down membranes.
- Blackout (ARF-D) blinds available.
- \* DEF is available as solar(S) or hard wired(E) electric versions.

#### **DU6 Glazing Benefits**



- Glazing Unit DU6 Tempered Tempered Laminated • Double Chamber Glazing 6H-18-4HT-18-44.2T / 6H-16-4HT-18-55.2T for
- sizes from 48x48
- Outer pane, tempered
- Centre pane Low Emission toughened
- Internal pane Low Emission laminated PVB Class P2A according to standard EN 356
- Warm TGI spacer
- U-Value 0.5 (glass)
- Glazing cavity filled with inert Argon gas

FAKRO FLAT ROOF DECK MOUNTED SKYLIGHT DEF, DMF, DXF DIMENSIONS							
2°-15° 0/12-3/12		П	П	П		П	
Model		22/46	30/30	30/36	36/36	36/48	48/48
Rough opening (WxF	in.	21% x 45%	29% x 29%	29% x 34¾	34¾ x 34¾	34¾ x 46%	46% x 46%
Outside frame (SxL)	in.	31% x 55%	39¼ x 39¼	39¼ x 44½	441/8 x 441/8	44% x 55%	55% x 55%
Daylight area (glass)	sq. ft. m²	5.06 0.47	4.52 0.42	5.43 0.5	6.46 0.6	8.93 0.83	12.49 1.16



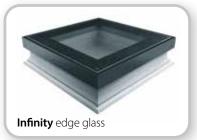
## WAI KABI F SKYLIGHT

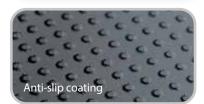
## **DXW**

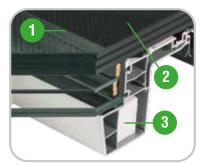
The DXW walkable skylight is another example of FAKRO's industry leading product development. Ideal for an accessible at roof, creating an incredibly strong walkable surface, while allowing natural light into the room below. Its modern design, quality nish and engineering eliminates the danger of a trip hazard by being level with the roof surface, and featuring a durable non-slip surface coating. The only skylight manufacturer to o er this product.



FAKRO has been given the prestigious award "ICONIC AWARDS 2018: Innovative Architecture - Best of Best" for its innovative DXW "walkable" at roof window.







- Passive, triple glazing with load capacity of 1,100 lbs/sq ft.
- 2 Anti-slip coating
- Multi-chamber PVC profiles filled with insulating material





- Energy e cient DW6 triple pane glazing (Lam/Temp/Lam) with argon gas.
- Enhanced load capacity of 1,100 pounds /sq. ft.
- Special non-slip coating to ensure complete safety when walking across.
- Quick and easy installation with pro les that clamp the covering material and facilitate the nish of the window connection with the roo ng material included as standard.
- Frame is constructed of multi-chamber PVC pro les lled with high performance insulation and the heavy-duty DW6 glazing unit is passive, double-chamber with a U-value of 0.12 Btu/h ft<sup>2</sup> F.
- Suitable for roof pitches between 0 to 15 degree.
- Designed for usable at roofs to create a fully walkable surface, while the room below is infused with natural light.

#### **DW6 Glazing Benefits**



- $\bullet \ \mathsf{Glazing} \ \mathsf{Unit} \ \mathsf{DW6} \mathsf{Walkable} \ \mathsf{surface}, \mathsf{Laminated} \ \mathsf{-} \ \mathsf{Tempered} \ \mathsf{-} \ \mathsf{Laminated}$
- Double chamber Glazing 888.44(1xESG, 2xTVG)-16-4HT-18-66.2T
- Outer pane Anti-slip laminated
- Centre pane Low Emission tempered
- Internal pane Low Emission laminated PVB Class P2A according to standard EN 356
- Warm TGI spacer
- U-Value 0.5 (glass)
- Glazing cavity filled with inert Argon gas

Energy e cient DW6 triple pane glazing (Laminated - Tempered - Laminated).

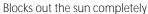
#### **FAKRO WALKABLE SKYLIGHT DXW DIMENSIONS** 2°-15° 0/12 - 3/12 Model 22/46 30/30 30/36 36/36 36/48 48/48 Rough opening in. 21% x 45% 29% x 29% 29% x 34¾ 34¾ x 34¾ 34¾ x 46% 46% x 46% (WxŘ) Outside frame 31% x 55% 39¼ x 39¼ 391/4 x 441/8 44% x 44% 44% x 55% 55% x 55% (SxL) 5.06 4.52 5.43 6.46 8.93 12.49 Daylight area sq. ft. 0.47 (glass) 0.42 0.5 0.6 0.83 1.16 $m^2$



#### Features:

- Gradual reduction of incoming sunlight to full blackout.
- Partial protection from the solar heat gain.
- Blind stops and locks in any position.
- Reduction of heat loss during winter.
- Protection against harmful UV radiation.
- Provides complete privacy.
- The durable fabric is designed for easy cleaning.
- Comes in manual or electric version.







Controls room lighting perfectly

# BLACKOUT BLINDS

## **SRF/ARF**

Control the light in a room like a child's bedroom with the SRF/ARF blackout blind. Our stylish, decorative blind is designed with runners at the sides to allow the blind to be positioned anywhere along the window. It also prevents daylight bleeding in from the sides, providing a complete blackout. High-quality construction throughout, the aluminum runners covering the fabric edge, a special seal in the lower aluminum slat, and the material covering the outer face of the fabric (re ecting the sun's UV rays) blocking out incoming light. While reducing light, the SRF/ARF blinds also reduce heat gain in the summer and prevent heat loss in the winter. The specially formulated fabric also protects against harmful UV radiation.

#### Blackout blinds for skylights:

**SRF-EX Z-Wave** – electric blackout blind for FX skylights. **SRF-EV Z-Wave** – electric blackout blind for FV, FVE, FVS skylights.

SRF-MX – manual blackout blind for FX skylights.

**SRF-MV** – manual blackout blind for FV, FVE, FVS skylights.

#### Blackout blinds for roof windows:

**ARF** – manual blackout blind for pivot roof windows. **ARF-Z-Wave** – electric blackout blind for pivot roof windows, for FTP/FPP/FTT\*.

#### Blackout blinds for at roof windows:

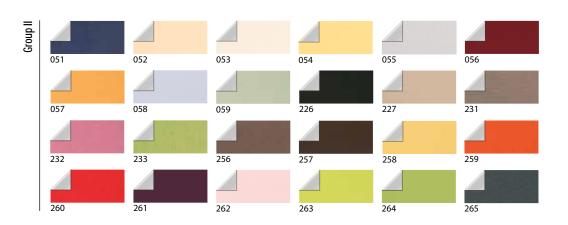
ARF/D – manual blackout blind for at roof windows. ARF/D Z-Wave – electric blackout blind for at roof windows.

\* Z-Wave blinds for model FTT must be ordered at the same time as the window for correct installation.

For out of reach areas, manual blinds operate with SZS Rod.

#### Blackout Blinds Come In Two Colour Categories







Z-Wave provides superior Smart Home performance as it is the leading industry broadcast platform, and it does not compete for bandwidth with your WiFi and Bluetooth devices.

Z-Wave is widely used across most Smart Home systems and devices, providing the consumer with the con dence that it will be supported and upgraded for years to come.

# LIGHT FILTERING BLINDS

## SRP/ARP

The light reducing SRP/ARP roller blind provides protection against sunlight, pleasantly shading the interior during sunny days. A wide range of colors and designs to choose from will enhance the looks of the room and allows you to match the material with the interior design.

The aluminium runners cover the material edges and make it possible to lock the blind in any position.

#### SRP light Itering blinds for skylights:

**SRP-EX Z-Wave** – electric light- Itering blind for FX skylights. **SRP-EV Z-Wave** – electric light- Itering blind for FV, FVE, FVS skylights.

**SRP-MX** – manual light- Itering blind for FX skylights. **SRP-MV** – manual light- Itering blind for FV, FVE, FVS skylights. **ARP** manual light- Itering blind for FTP/FPP/FTT roof windows. **ARP-Z-Wave** -electric light- Itering blind for FTP/FPP/FTT\* roof windows.

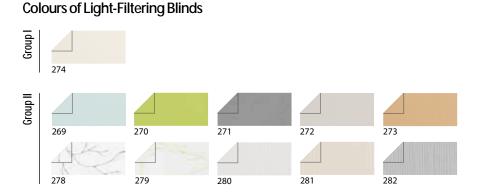
Light- Itering blinds are not available for at roof windows.

\* Z-Wave blinds for model FTT must be ordered at the same time as the window for correct installation. For out of reach areas, manual blinds operate with SZS Rod.





Rail guide system



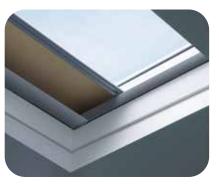


Wide selection of fabrics

#### Blinds for Flat Roof Skylights

#### Blackout Blind ARF/D

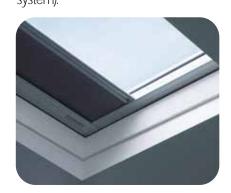
Manually operated with SZS rod.



#### ARF/D Features:

- Gradual reduction of the incoming sunlight up to black out.
- Partial protection against heat from the sun.
- Ability to lock the blind in any position.
- Reduction of heat loss in the room in winter.
- Protection against UV radiation available in two versions - manual and electrical (opened with Z-Wave wireless radio system).

# **Blackout Blind ARF/D Z-Wave** Electrically operated with remote control or wall switch (wireless radio system).





# RADIO CONTROL SYSTEM

FAKRO FVS/FVE skylights are equipped with the industry standard Z-Wave Smart Home radio technology. Z-Wave is one of the most widely used wireless broadcasting systems, so our products easily integrate with your Smart Home systems. Z-Wave is well supported, being constantly improved and updated to adjust to changing technology, removing the risk of a proprietary system o ered by competitive manufacturers that may lack the support necessary to keep it up-to-date.

Alternatively, the skylight can be operated without being connected to a Smart Home Hub, with the included ZRH 12 Remote Control controlling the skylight directly.

The Z-Wave technology links all compatible Smart Home Hubs and devices into a single network: skylights and blinds, lighting, thermostats, alarms, computers, telephones, and air conditioning. Integrating with popular Smart Home systems such as Wink, Nest, Samsung SmartThings, Alexa, and Apple HomeKit.

Z-Wave is easy to install, expand, and manage, saving you time and money, while maximizing usability. Z-Wave eliminates unnecessary control units and wiring between electronic devices. Ideal for new builds, renovations or adding to an existing system.







#### Control Rod SZS

The expanding telescopic SZS Control Rod consists of two easy to adjust sections, providing e ortless opening and closing of your hard to reach skylights. The control rod is available in two sizes, 4' - 6' and 6' - 10'. At the end of the pole is a sturdy metal ball connector for operating the manual opening mechanism of the FV skylight and manual blinds.



## Hexball Adaptor

The SZK Crank on FV skylights installed in out of reach places can be replaced with a Hexball adaptor to allow operation with a SZS Control Rod. The Hexball adaptor is included with the SZS control rod.



#### Remote Control ZRH12

The ZRH12 - Z-Wave radio remote control is for use with FAKRO electric or solar powered skylights and blinds. The remote can create 12 separate groups of devices and control up to 12 receivers per each group. Z-Wave is the industry standard for Smart Home Technology. The ZRH12 is included with all FVE/FVS skylights.





## Wall Switch Keyboard ZRW7

The ZRW7 Z-Wave wall switch keyboard controls FAKRO electric or solar skylights and blinds. The keyboard operates up to 7 seperate groups with up to 12 skylights in a group (84 devices in total). Z-Wave is the industry standard for Smart Home technology.



## Crank Handle SZK

The SZK crank handle is used to manually operate a skylight that is within reach. It comes standard with FAKRO manual venting skylights.



## Control Your FAKRO Skylight (FVS/FVE) Using Our Remote Control or Keyboard Control your FVS/FVE skylights as a stand alone or multi-unit system using the included ZRH12 remote control. ZRH12 Remote Control (Included) • The remote controls up to 12 separate **WAVE** groups with up to 12 skylights per PLUS group (144 total). A wall keyboard is available, ZRW7, operating up to 7 separate groups with up to 12 skylights per group (84 total). ZRW7 Wall Keyboard (Optional)



In order to provide our customers products that are as safe as possible our skylights are tested for code compliance by accredited laboratories. After our products pass the tests and meet the requirements of applicable codes, they are certified by these recognized organizations.

Standard FAKRO skylights comply with the applicable requirements of the:

International Building Code (IBC)
International Residential Code (IRC)
International Energy Conservation Code (IECC)

FAKRO deck mounted skylights are tested according to Canadian Standards Association (CSA) requirements.

With the use of the highest quality specialized coated glass in our glazing units, FAKRO skylights are NFRC and ENERGY STAR® qualitied for use in the USA and Canada. FAKRO skylights also meet the requirements of IGCC (Insulating Glass Certitication Council) and IGMA (Insulating Glass Manufacturers Alliance), requirements for initial and post gas. If weathering certitication.

FAKRO's (egress) access roof window FWU 24/46 tested in accordance with IRC section R 310.1.1, R 310.1.2 and is o cially recognized as a certi ed Fire Exit roof window (Egress window).

Certi cate available at: fakro.ca

- AAMA/WDMA/CSA 101/I.S.2/A440-08 NAFS North American Fenestration Standard/Speci cation for Windows, Doors, and Skylights
- A440S1-09 Canadian Supplement to AAMA/WDMA/CSA 101.I.S.2/A440, NAFS
- NFRC 100 Procedure for determining fenestration product U-factors



FAKRO's products are made to the highest quality and specications, incorporating innovative technology, exacting manufacturing processes and production management, and continuous improvements to manufacturing and working conditions. Quality control is an essential part of our manufacturing and each product is quality assessed at every stage of the production process. Our FAKRO Quality Control Supervisors perform 70 dierent laboratory control and measurement tests, ensuring the highest standard of product is delivered to our customer.

Quality control is conducted on all incoming products and components during the production process, leading to the highest standard of nished product.

We aim to provide consistent quality on all manufactured products, which earns our customers trust and continued satisfaction.

We are relentless in addressing new customer needs and our pursuit of future product development. Our dedication to ongoing research and development is essential to our success as a company, incorporating leading design and innovation into our existing and future products. Our commitment to customer satisfaction and honouring your trust in our products has been one of our core values since 1991.









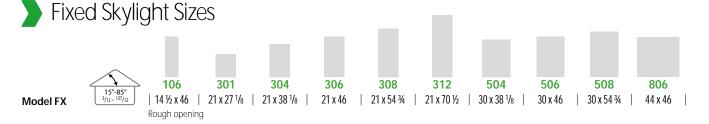






## Manual Venting Skylight Sizes

301 304 306 308 312 504 506 508 806 Model 15°-85° 3/12- 137/12 21 x 27 1/8 21 x 38 1/8 21 x 46 21 x 54 ¾  $21 \times 70 \frac{1}{2}$ 30 x 38 ½ 30 x 46 30 x 54 ¾ 44 x 46 Rough opening



## Roof Window Sizes. Top Hung and Pivot Window



## Flat Roof Skylights, DEF, DMF, DXF





Manufacturer stipulates that these ratings conform to applicable NFRC procedures for determining whole product performance. NFRC ratings are determined for a xed set of environmental conditions and a speci c product size. NFRC does not recommend any product and does not warrant the suitability of any product for any speci c use. Consult manufacturer's literature for other product performance information.

With the use of highly selective solar glass in our glazing units, FAKRO skylights are NFRC quali ed for use in Canada.

# COLUMBIA SKYLIGHTS IS THE EXCLUSIVE CANADIAN DISTRIBUTOR OF FAKRO SKYLIGHTS AND ROOF WINDOWS

Since 1955 Columbia Manufacturing Co. Ltd., the leading Canadian skylight manufacturer, has sought innovative ways to service its customers, providing leading energy e cient glazing options and customization of all skylight product lines, both xed and venting. We are pleased to o er the widest range of natural light options for both residential and commercial projects.

We are proud to be the exclusive Canadian distributor for FAKRO Skylights, the world's second largest manufacturer of skylights, accounting for close to 15% of all skylight sales worldwide, with products sold in more than 50 countries. This new FAKRO lineup includes a full range of deck mounted skylights — xed, manual, electric and solar venting. All electric and solar venting skylights are equipped with Z-Wave technology allowing for easy Smart Home automation and control of your skylights. FAKRO also provides a full line of roof, centre and top pivot, and egress windows, including cabrio balcony windows and other specialty products.

As an award winning innovator, FAKRO manufactures a number of exclusive products. Such as the Passive House compatible pivoting quadruple glazed skylight, the architecturally striking walkable and at roof skylight with **In nity** glass, and the superior quality manual and electric blinds.

The new combined Columbia/FAKRO product line allows you to ful II every possibility for your future projects. We sincerely appreciate your past and continued support, and look forward to serving you from our BC and Ontario distribution centres.









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Fax: 604 437 4445
Toll Free Tel: 888 437 5557
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#### Columbia Skylights

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#### FAKRO Canada

fakro.ca

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