



# ROOF WINDOWS

PRODUCT SELECTOR  
AND PRICE LIST  
JULY 2022



# CHANGING YOUR VIEW

The part which roof windows play in attic rooms has massively influenced the way we look at interior design. Whether for a home or a commercial project, our huge choice of roof windows can be used in a range of different ways. Our close-grain pine will look sensational for years while our sleek, stylish frames provide a bigger glazing area to let in more light. With all these benefits and more it's not hard to see why FAKRO roof windows become a focal point in their own right and prompt such consistently positive comments.

For those of you looking to achieve the highest levels of energy saving, BREEAM, Passive House or "EnerPHit" our triple and quadruple-glazed non-vented FTT range offers an exceptional standard of performance. At the heart of all our products FAKRO provide a high level of security, highly resilient hinges and seals, and a standard of timber treatment which we believe is second to none.

FAKRO uses responsibly sourced timber and as well as natural pine, you can opt for white PU-coated, white acrylic painted, pine or PVC products, all of which are available in conservation style (products are available upon request). BBA and FSC® certified products are available on request together with warranties of 10 years for windows and 20 years for glazing giving you peace of mind that the name FAKRO is synonymous with quality.

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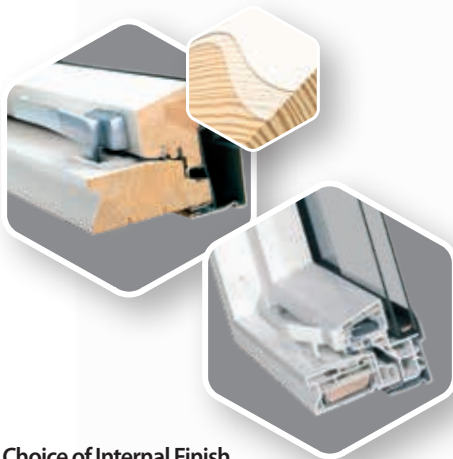
# WHAT MAKES A FAKRO ROOF WINDOW BETTER?

FAKRO 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 finishing which means you can rest assured they will go on looking good for years to come. Our windows offer a perfect combination of style, sustainability, security and long design life. To achieve such high performance involves ongoing refinement and improvement to every roof window that we design.



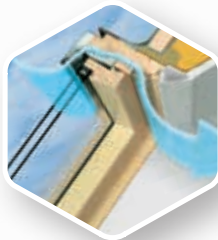
## Premium Close Grained Redwood Timber

The pine we use offers the clearest visual evidence of our roof window quality. Not only does its close grain look stylish, we obtain timber from FSC® certified sources.



## Choice of Internal Finish

FAKRO offers two types of roof windows for rooms in which high levels of humidity are created. You have the choice of either white polyurethane-coated pine or PVC in white, golden oak and pine finishes.



## Automatic Controlled Ventilation

The FAKRO automatic vent which is installed in FAKRO pine roof windows is activated by changes in atmospheric pressure. It provides the optimum balance of fresh air regardless of weather conditions.



## Ease of Installation

Our easy to use "bracket fix" installation system enables windows to be fitted either to rafters or battens and sarking.



## Exceptional Security

FAKRO's TopSafe® system gives confidence and peace of mind that our roof windows offer exceptional burglary resistance. TopSafe provides additional hinge and lock reinforcement to prevent the sash from being forced.



## thermoPro technology HIGH ENERGY SAVINGS

What really sets FAKRO windows apart is their low level of heat loss. Unlike some manufacturers who provide U-values just for glazing units, FAKRO provides information for the whole window. When comparing our performance with other products you will see how our non-vented, quadruple glazed FTT U8 Thermo has a single glazing unit area and a U-value of 0.58W/m²K which leads the market.



# CERTIFICATES

One of the key factors differentiating manufacturers from one another is certification of products. At FAKRO we continually look for ways to innovate and improve our designs, not just with new roof windows but existing ones. In 2012 this yet again enabled us to set an industry standard as we achieved Passive House certification of our industry leading quadruple-glazed FTT U8 Thermo. The FTT U8 offers an amazing U-value of 0.58 W/m<sup>2</sup>K and provides the ideal solution for airtight designs.

NBS Plus - FAKRO specification clauses are available via NBS Plus. This enables concise, technically accurate and up-to-date information in relation to our extensive range of roof windows and roofing accessories to be copied and pasted.

In the same way, we led the market by becoming the first roof window manufacturer to secure BBA certification - as long ago as 2002. Today, many more of our products are accredited including our popular ranges of centre pivot and top hung windows. This includes products in conservation style and the highly thermally efficient FTT U6 triple-glazed window while, for specifiers and buyers in Ireland we also have Irish Agrément Board (IAB) certification.

The NHBC accepts the use of FAKRO Roof Windows, when installed and used in accordance with BBA certificates in relation to NHBC FAKRO Standards.

Our roof windows offer scope for you to buy or specify products using timber from sustainable sources; indeed we are the only such manufacturer to offer FSC® certification for the higher quality, close-grain pine which we use. We also design all windows to be stripped down for recycling of all parts which, combined with the use of sustainable timber, shows the extent of our commitment to environmental issues.

CE marking provides a passport that enables a construction product, irrespective of its origin, to be legally placed on the market of all EU member states. Unlike some manufacturers, FAKRO declares full details of performance for all points which make up a CE mark, yet more evidence that our products exceed minimum standards for health, safety and economy of energy.



# NEW DIMENSION OF INNOVATION

Innovation is the DNA of FAKRO and the main driving force of the company's development. It's a philosophy of unconventional thinking, thanks to which the new solutions expand functionality and enhance product quality. FAKRO has redefined roof windows by introducing an automatic ventilation flap V40P, the topSafe system which strengthens the construction of the window, or thermoPro technology which increases the quality and parameters of the windows.

By focusing on development and innovation, FAKRO contributes to creating comfortable living conditions for people around the world.



## topSafe

### SYSTEM TOPSAFE

#### INCREASED SECURITY

Roof windows have to ensure safety of use and protect against unauthorised access to the room from the roof. The special system of the window structure reinforcement topSafe significantly improves resistance of roof windows to break-in attempts and protects against the sash opening under foot pressure if inadvertently stepped on.

The topSafe system consists of:

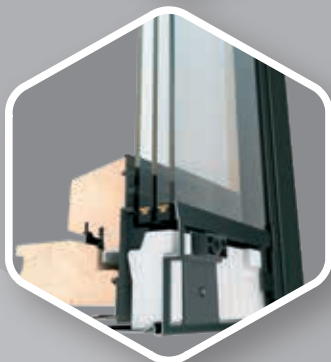
- **Innovative** - installation system of specially shaped hinges,
- **Metal** - element strengthening the locking system,
- **Metal** - steel bar, making it difficult to break the window using tools



## V40P

### AUTOMATIC V40P AIR INLET

Positioned in the top part of the frame. At a pressure difference of 10Pa air inlet capacity is up to 49m<sup>3</sup>/h depending on the window width. The capacity rises up to the point where the optimum value is achieved. If the pressure difference continues to grow, the airflow capacity stays on the same stable level. An elastic, pneumatic flap deflects, limiting the amount of inflowing air by reducing the air inlet duct area e.g. when strong gusts of wind appear and in the winter time.



## thermoPro

### THERMOPRO TECHNOLOGY

The roof windows are manufactured using thermoPro technology. The solutions introduced ensure improved quality and parameters of windows. ThermoPro technology increases energy-efficiency performance, provides greater durability, ensures excellent tightness and facilitates the installation process of roof windows.

#### BETTER THERMAL INSULATION OF WINDOWS

- Reduced heat loss and lower heating bills
- New version of low emission coating on the glass
- Introduction of insulation inserts in the bottom corners of the sash aimed at enhancing window's energy-efficiency performance

#### GREATER WINDOW TIGHTNESS IN TERMS OF AIR PERMEABILITY

Windows manufactured using thermoPro technology feature 3rd and 4th tightness class according to EN12207, thus reducing the amount of air penetrating into the room. It is particularly important for mechanical ventilation.

#### GREATER WOOD DURABILITY THANKS TO WATER DRAINAGE CHANNELS

Special water drainage channels are introduced in the lower corners of the frame to discharge water from condensation and potential leakage caused by, e.g. damaged external aluminium profiles. Wooden profiles are less exposed to the moisture, which adds to their durability.

#### EASIER INSTALLATION GREATER COMFORT OF WORK

New brackets facilitate installation work and increase the ability to adjust roof windows during their installation. In addition, the use of Torx screws streamlines the installation process of roof windows.



# ROOF WINDOW CONSTRUCTION

## TYPES OF WINDOW PROFILES STRUCTURE

FAKRO offers roof windows for rooms in which high levels of humidity are created



### Wooden profiles with natural acrylic lacquer

The basic material for the production of windows is specially selected high quality pinewood, glued in layers. The wood is vacuum impregnated and lacquered with eco-friendly acrylic lacquer in natural colour. Such windows find their destination in most of rooms in the attic.



### Wooden profiles with white acrylic finish

Wood with double layer of white acrylic paint. White windows with visible wood pattern gain recognition in the eyes people who value minimalist and modern trends.



### Wooden profiles with white polyurethane paint

For rooms with periodically elevated humidity levels (kitchens, bathrooms) recommended are wooden windows coated with three layers of white polyurethane lacquer to create durable and perfectly smooth surface. Visible parts of the window such as bolts or locking elements are made of plastic in white colour which add to its aesthetics.



### PVC profiles

Aluminium clad - plastic windows are intended for rooms with increased humidity (bathrooms, bathing salons). Multi-chamber PVC profiles are strengthened from the inside with galvanized steel. The plastic used in the window does not absorb any moisture and the window itself is durable and corrosion free. The PVC profiles are classified with class A - the highest by EN 12608 standard. Windows are also available in golden oak (GO) and pine (PI) veneer. Selected windows are made in innovative profile joining technology V-PERFECT.



### We Don't Just Do White

FAKRO roof windows can be manufactured in any colour from the RAL classic palette. That's over 200 colours customers can specify to special order for their chosen projects. Our standard natural pine, white acrylic, PU coated and PVC roof windows can be received from stock within three days.



## PERFORMANCE GUARANTEES

**10** year  
WARRANTY  
for window

**∞ LIFETIME**  
glazing unit hail  
resistance warranty

Performance Guarantees

Whether buying natural pine, PU-coated pine or PVC, FAKRO offers a 10 year warranty for all windows. We also offer a no quibble lifetime warranty against damage by hail stones.



**Centre pivot roof windows** are still the most popular design, with a wide variety of options including highly energy-efficient windows suited to airtight construction, burglar-resistant windows (particularly suited to low pitch roofs and multi-occupancy buildings). All can be rotated through 180° to clean the outer pane from within the room. A choice of natural pine, white acrylic, white PU-coated pine and PVC is available.

**Top hung and pivot dual function roof windows** provide total flexibility of use. When open, the top hung function provides an unrestricted field of view at a lower height than a centre pivot window while centre pivot operation enables the sash to be rotated through 180° to clean the outer pane from within the room. A choice of natural pine, white PU-coated pine, white acrylic and PVC is available.

**High pivot roof windows** function in the same way as a centre pivot window but with the axis of rotation slightly higher in the frame to enable more head space. This enables a greater glazing height to be achieved without adding to the window's width. With scope also to choose a twin sash window in a single frame (the FDY-V proSky Duet window), this can extend up to 2.55 metres.

## STANDARD ROOF WINDOWS

type	TOP HUNG AND PIVOT WINDOWS				CENTRE PIVOT						CENTRE PIVOT			
material	wood		PVC		wood		PVC		wood		PVC		PVC	
natural pine	FPP-V P2 preSelect MAX	FPP-V P5 preSelect MAX	-	-	FTP-V U3	FTP-V P2	FTP-V P5	FTP R1	-	-	FTP-V P2 Z-Wave/WiFi	FTP-V P5 Z-Wave/WiFi	-	-
white acrylic	FPW-V P2 preSelect MAX	FPW-V P5 preSelect MAX	-	-	-	FTW-V P2	FTW-V P5	-	-	-	FTW-V P2 Z-Wave/WiFi	FTW-V P5 Z-Wave/WiFi	-	-
white polyurethane	FPU-V P2 preSelect MAX	FPU-V P5 preSelect MAX	-	-	-	FTU-V P2	FTU-V P5	FTU R1	-	-	FTU-V P2 Z-Wave/WiFi	FTU-V P5 Z-Wave/WiFi	-	-
white PVC	-	-	PPP-V P2 preSelect MAX	PPP-V P5 preSelect MAX	-	-	-	-	PTP-V P2	PTP-V P5	-	-	PTP-V P2 Z-Wave	PTP-V P5 Z-Wave
conservation version:	+	+	+	+	+	+	+	+	+	+	+	+	+	+
view														
air inlet			V35					non-vented	V35				V35	
air inlet air flow	up to 49 m³/h		up to 41 m³/h		up to 49 m³/h		-		up to 41 m³/h		up to 49 m³/h		up to 41 m³/h	
glazing	double	triple	double	triple	double	double	triple	double	double	triple	double	triple	double	triple
Ug (EN 673)	1,0 W/m²K	0,5 W/m²K	1,0 W/m²K	0,5 W/m²K	1,0 W/m²K	1,0 W/m²K	0,5 W/m²K	1,0 W/m²K	1,0 W/m²K	0,5 W/m²K	1,0 W/m²K	0,5 W/m²K	1,0 W/m²K	0,5 W/m²K
Uw	1,3 W/m²K	0,97 W/m²K	1,3 W/m²K	1,1 W/m²K	1,3 W/m²K	1,3 W/m²K	0,97 W/m²K	1,3 W/m²K	1,3 W/m²K	1,1 W/m²K	1,3 W/m²K	0,97 W/m²K	1,3 W/m²K	1,1 W/m²K
topSafe system	+		+		+		+		+		+		+	
acoustic insulation	35 dB	35 dB	33 dB	36 dB	32 dB	35 dB	35 dB	39 dB	33 dB	36 dB	35 dB	35 dB	33 dB	36 dB
handle	elegant		elegant white		elegant		elegant		elegant white		elegant		elegant white	
seals	4		4		4		4		4		4		4	
installation pitch	15-55°		15-55°		15-90°		15-90°		15-90°		15-90°		15-90°	

\*WINDOW U-VALUE WHEN INSTALLED WITH THERMAL FLASHING

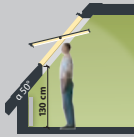
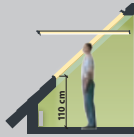
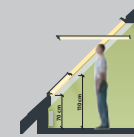
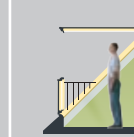
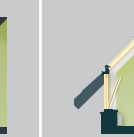







## GLAZING UNIT

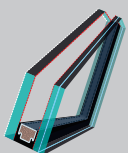
GLAZING UNIT	U3	P2	P5	U6	U8	R1
GLAZING STRUCTURE	4H-16-4T	4H-15-33.2T	4HS-10-4HT-8-33.2T	6H-18-4HT-18-33.2T	4H-12-4HT-12-4HT-12-4HT	6H-12-33.2SIT
TECHNICAL SPECIFICATION	ENERGY SAVING	ANTI BURGLARY	SAFE	HIGHLY ENERGY EFFICIENT	PASSIVE GLAZING	SOUND REDUCING
GLAZING	DOUBLE	DOUBLE	TRIPLE	TRIPLE	QUADRUPLE	DOUBLE
INNER LAMINATED GLASS		(CLASS P2A)	(CLASS P2A)	(CLASS P2A)		(CLASS P2A)

**The balcony window** is the ultimate, modern twin sash window. With the top sash opening as a top hung window, the bottom sash with laminated internal glazing opens from the bottom to reveal built-in balustrades.

**L-shaped windows** provide scope to take any of FAKRO's standard roof windows into a vertical wall. This gives a much extended field of view and a bigger glazing area which maximises the use of natural daylight.

**Conservation roof windows** are designed to meet planning requirements in conservation areas or for the sensitive development of older buildings. In addition to all our standard windows being available in conservation style, bespoke commissions are routinely undertaken.

CENTRE PIVOT		HIGH PIVOT		BALCONY		L-SHAPED		SIDE HUNG			
											
wood		wood		wood		wood		wood		wood	
FTT U8 Thermo	FTT U6	FYP-V P2 proSky	FYP-V P5 proSky	FDY-V P2 Duet proSky	FGH-V P2 Galeria	FGH-V P5 Galeria	BD_P2, BVPP2, BXP P2	BD_P5, BVP P5, BXP P5	FWR P2 / FWL P2		
FTT/W U8 Thermo	FTT/W U6	-	-	-	-	-	BD_W/P2, BVWP2, BXPWP2	BD_W/P5, BVWP5, BXPWP5	-		
FTT/U U8 Thermo	FTT/U U6	FYU-V P2 proSky	FYU-V P5 proSky	FDY-V/U P2 Duet proSky	FGH-V/U P2 Galeria	FGH-V/U P5 Galeria	BD_U/P2, BVUP2, BXPUP2	BD_U/P5, BVUP5, BXPUP5	FWR/U P2 FWL/U P2		
-	-	-	-	-	-	-	-	-	-		
+	+	+	+	+	-	-	-	-	+		
											
non-vented		V4OP		V4OP		V4OP		—		—	
-		up to 49 m³/h		up to 49 m³/h		up to 49 m³/h		—		—	
quaduple	triple	double	triple	double	double	triple	double	triple	double		
0,3 W/m²K	0,5 W/m²K	1,0 W/m²K	0,5 W/m²K	1,1 W/m²K	1,1 W/m²K	0,5 W/m²K	1,1 W/m²K	0,5 W/m²K	1,0 W/m²K		
0,58 W/m²K	0,80 W/m²K	1,3 W/m²K	0,97 W/m²K	1,3 W/m²K	1,5 W/m²K	1,1 W/m²K	1,3 W/m²K	0,88 W/m²K	1,4 W/m²K		
+		+		+	+	+	—		—		
36 dB	38 dB	35 dB	33 dB	35 dB	35 dB	34 dB	37 dB	38 dB	—		
elegant		elegant		elegant		elegant		elegant		standaard	
5		4		4		4		2		2	
15-70°		20-65°		25-65°		35-55° 45-55°		90°		15-55°	



G6

6HST-12-33.1T

SOLAR CONTROL

DOUBLE



# HOW TO SELECT A ROOF WINDOW

1

## HOW WILL YOU MAKE A HOME?

- Choose the correct type of window to suit your environment.
- Classic centre pivot windows make the windows easy to clean as the sash will swivel to allow cleaning of the outside on the inside!
- Top hung and pivot windows give an unrestricted view at a lower height than a standard centre pivot window.



2

## HOW MUCH DAYLIGHT DO YOU NEED?

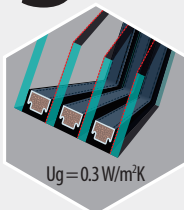
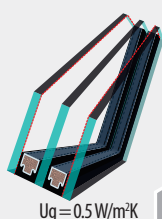
- The higher the windows are fitted within the roof, the more natural light floods the room.
- It is recommended that the glass area should be at least 15-20% of the total floor area for best results.



3

## WHICH GLAZING UNIT TO CHOOSE?

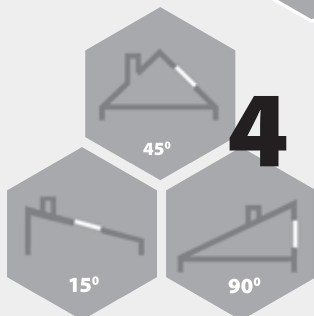
- For windows above head height you should use a laminated glass. If the glass shatters a plastic membrane between the two sheets of glass retain the shards.
- Energy-efficient triple glazed units ensure exceptional thermal efficiency and can almost eliminate heat loss altogether.
- Other glazing choices include; tinted, obscure, reflective and self-cleaning glass.



4

## WHAT IS YOUR ROOF PITCH?

- Most roof windows are well suited for a roof pitch of between 15 and 90 degrees. However, the installation pitch range may differ for certain types of windows.
- For flat roofs you can choose between standard domed or non-domed designs.
- To ensure the flow of water from the glass surface of non-domed windows, the window should be installed with a pitch of at least 2 degrees.



5

## SUPER SAVINGS WITH HIGHLY ENERGY-EFFICIENT WINDOWS

- A well insulated roof can be let down by a poorly insulated window which will cause heat loss.
- Standard double glazed windows with a thermally insulated glazing unit and flashing may suffice.
- For increased performance you should consider a highly energy-efficient roof window specially designed and supplied with insulating flashing.

6

## MANUAL OR ELECTRIC CONTROL?

- Electric control using wireless technology is available to operate your roof windows – supplied as standard with a factory fitted motor, remote control and a rain sensor. Allows multiple windows and accessories to be operated from one controller. The use of the Z-Wave protocol permits communication with other smart home devices.



7

## HOW TO PROTECT AGAINST HEAT AND SUNLIGHT?

- Contemporary awning blinds can be up to eight times more efficient than internal blinds in terms of passive heat reduction while still allowing light through.
- As well as heat absorption, solar powered awnings open automatically in cloudy weather to increase the available light. In winter they reduce noise from rain and hail and protect the window from an accumulation of snow and leaves.



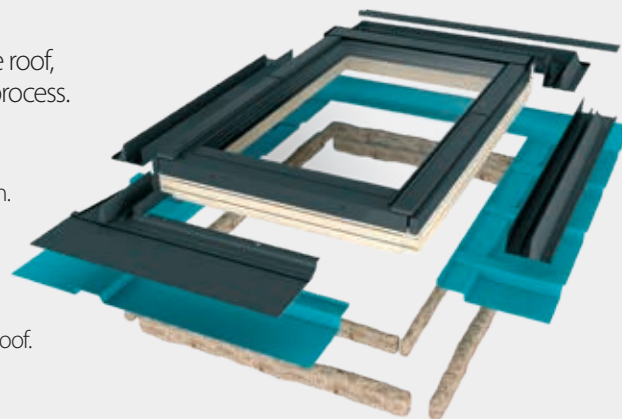


# SELECTING THE CORRECT FLASHING KIT

Flashing kits are necessary to provide a neat and waterproof connection to the roof, therefore choosing the correct kit is an essential requirement in the selection process.

FAKRO roof window flashings are categorised according to the roof material and application.

- Enables roof windows to be installed with any type of roof covering.
  - Standard depth and ideal for tiles such as the Double Roman.
  - 3cm higher than the standard depth, for high profile tiles such as the Bold Roll.
  - 3cm deeper than the standard depth, for where a recessed style is required.
- Ideal for conservation roof windows which invariably need to be positioned lower in the roof.



## FLASHING KIT TYPE

	Type of roofing material		Flashing type	Fitting depth	Maximum profile depth of roof material	Roof pitch
ES		Flat roof coverings such as: - roofing felt - bitumen - flat sheet metal	ESV	V(0)	10mm	15° – 90°
			ESJ	J (–3 cm)	10mm	20° – 90°
EL		Flat roof coverings such as: - bitumen - slate	ELV	V(0)	up to 10mm	20° – 90°
			ELJ	J (–3 cm)		
EP		Plain tile roof coverings non interlocking (Peg Tiles)	EPV	V(0)	up to 16mm	25° – 90°
			EPJ	J (–3 cm)		
EZ		Profiled roof coverings such as: - roof tiles - corrugated metal sheeting	EZN-A	N (+3 cm)	up to 45mm	15° – 90°
			EZV-A	V(0)	up to 45mm	15° – 90°
			EZJ-A	J (–3 cm)	up to 45mm	20° – 90°
EH		High profile roof coverings such as: - roof tiles - corrugated metal sheets	EHN-A	N (+3 cm)	up to 90mm	15° – 90°
EH_-AT Thermo		High profile roof coverings such as: - roof tiles - corrugated metal sheeting	EHV-AT Thermo	V(0)	up to 90mm	15° – 90°
			EHN-AT Thermo	N (+3 cm)	up to 120mm	15° – 90°
EE		Flat roof coverings such as: - flat sheet metal - standing seam zinc etc	EEV	V(0)	—	15° – 90°
			EEJ	J (–3 cm)		20° – 90°
E_A		Flat roof coverings such as: - roofing felt - bitumen - corrugated metal sheeting	ESA		10mm	10° – 75°
			EZA-A		up to 45mm	10° – 75°
			EHA-A		up to 90mm	10° – 75°



## CENTRE PIVOT WINDOWS

IN NATURAL PINE AND WHITE ACRYLIC FINISH

- Traditional centre pivot operation.
- Windows turn through 180° to clean outer pane within the room.
- Operating handle in the base of the sash for ease of use.
- Suitable for retro-fitting of electronic operation.
- Suitable for pitches from 15-90°.
- Windows equipped with highly energy-efficient double chamber glazing unit and internal glass laminated, anti-burglary class P2A. The window is particularly recommended for buildings where special emphasis is put on thermal energy savings.



**FTP-V**

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with natural acrylic lacquer.
- V40P automatic air vent to prevent unnecessary heat loss.



**FTW-V**

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with white acrylic paint.
- V40P automatic air vent to prevent unnecessary heat loss.

### CENTRE PIVOT WINDOWS IN NATURAL PINE AND WHITE ACRYLIC FINISH

windows external dimensions [cm]		55x78	55x98	55x118	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x118	114x140	134x98	94x160
effective glazing area [m²]		0.21	0.29	0.37	0.38	0.47	0.47	0.59	0.72	0.82	0.75	0.92	0.95	1.16	0.92	0.75
size symbol		01	02	16	03	04	05	06	07	13	08	09	10	11	12	80
NATURAL PINE	<b>FTP-V P2</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£305	£322	£336	£343	£375	£350	£396	£438	£508	£475	£511	£525	£557	£504	£570
	<b>FTP-V P5</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£486	£507	£525	£553	£573	£542	£599	£674	£807	£729	£742	£759	£807	£733	£928
	<b>FTP R1</b> R1 - Sound reducing glazed unit, Rw 39 dB non vented, U-value of window 1.3	£413	£426	£446	£454	£493	£464	£511	£586	£684	£606	£664	£677	£697	£658	£755
	<b>FTP-V U3</b> U3 - Energy saving double glazed unit. Toughened outer pane. U-value of window 1.3	£301	£318	£331	£349	£371	£346	£390	£432	£541	£491	£505	£519	£569	£498	£536
WHITE ACRYLIC	<b>FTW-V P2</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£305	£322	£336	£343	£375	£350	£396	£438	£508	£475	£511	£525	£557	£504	£570
	<b>FTW-V P5</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£496	£514	£527	£538	£567	£554	£586	£663	£796	£674	£707	£729	£785	£707	£862
	<b>FTW R1</b> R1 - Sound reducing glazed unit, Rw 39 dB non vented, U-value of window 1.3	£438	£456	£508	£508	£538	£523	£567	£669	-	£673	£741	£756	£777	£742	-

NOTE- OBSCURE E GLAZED (02) AVAILABLE TO ORDER – PLEASE CONTACT FAKRO SALES OFFICE FOR FURTHER DETAILS

### STANDARD FLASHING KITS FOR CENTRE PIVOT ROOF WINDOWS

windows external dimensions [cm]	55x78	55x98	55x118	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x118	114x140	134x98	94x160
size symbol	01	02	16	03	04	05	06	07	13	08	09	10	11	12	80
<b>EZV-A</b> for interlocking tiles up to 45mm profile	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>ELV</b> for non-interlocking slate up to 10mm thick	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>EPV</b> for plain tiles up to 16mm thick	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>EHN-A</b> for interlocking tiles up to 90mm profile	£84	£91	£96	£96	£100	£100	£105	£105	£120	£107	£110	£116	£119	£121	£123

**FULL FLASHING KIT  
SELECTION**  
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\* ALL WINDOWS AVAILABLE IN NON VENTED ON REQUEST

## CENTRE PIVOT WINDOWS

## IN WHITE POLYURETHANE FINISH

- Traditional centre pivot operation.
- Ideal for bathrooms, wetrooms, kitchens and environments with increased humidity.
- Windows turn through 180° to clean outer pane within the room.
- Operating handle in the base of the sash for ease of use.
- Suitable for retro-fitting of electronic operation.
- Suitable for pitches from 15-90°.
- Windows equipped with highly energy-efficient double chamber glazing unit and internal glass laminated, anti-burglary class P2A. The window is particularly recommended for buildings where special emphasis is put on thermal energy savings.



## FTU-V

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with white polyurethane paint.
- V40P automatic air vent to prevent unnecessary heat loss.

## CENTRE PIVOT WINDOWS IN WHITE POLYURETHANE AND PVC FINISH

windows external dimensions [cm]		55x78	55x98	55x118	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x118	114x140	134x98	134x160
effective glazing area [m <sup>2</sup> ]		0.21	0.29	0.37	0.38	0.47	0.47	0.59	0.72	0.82	0.75	0.92	0.95	1.16	0.92	0.75
size symbol		01	02	16	03	04	05	06	07	13	08	09	10	11	12	80
WHITE POLYURETHANE	<b>FTU-V P2</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£381	£403	£427	£429	£468	£438	£494	£547	£634	£547	£639	£656	£696	£630	£720
	<b>FTU-V P5</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£564	£596	£621	£638	£694	£648	£732	£809	£946	£851	£945	£971	£922	£933	£939
	<b>FTU R1</b> R1 - Sound reducing glazed unit, Rw 39 dB non vented, U-value of window 1.3	£487	£509	£525	£562	£574	£543	£600	£663	£849	£718	£742	£760	£852	£734	£851

NOTE- OBSCURE E GLAZED (02) AVAILABLE TO ORDER – PLEASE CONTACT FAKRO SALES OFFICE FOR FURTHER DETAILS

## STANDARD FLASHING KITS FOR CENTRE PIVOT ROOF WINDOWS

windows external dimensions [cm]	55x78	55x98	55x118	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x118	114x140	134x98	134x160
size symbol	01	02	16	03	04	05	06	07	13	08	09	10	11	12	80
<b>EZV-A</b> for interlocking tiles up to 45mm profile	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>ELV</b> for non-interlocking slate up to 10mm thick	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>EPV</b> for plain tiles up to 16mm thick	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>EHN-A</b> for interlocking tiles up to 90mm profile	£84	£91	£96	£96	£100	£100	£105	£105	£120	£107	£110	£116	£119	£121	£123

FULL FLASHING KIT  
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\* ALL WINDOWS AVAILABLE IN NON VENTED ON REQUEST



## TOP HUNG AND PIVOT DUAL FUNCTION - preSelect

IN NATURAL PINE AND WHITE ACRYLIC FINISH

- Top hung and pivot windows come with two independent opening mechanisms.
- The sash can be opened outwards from the top and via centre pivot.
- Innovative hardware system guarantees complete sash stability in both opening functions.
- Opening method can be switched using preSelect sliding switch placed in the side part of the frame which is accessible after opening the window.
- Windows turn through 180° to clean outer pane within the room.
- Suitable for pitches from 15° - 55° (or non-standard option for opening from 55° - 85°).



**FPP-V**  
preSelect

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with natural acrylic lacquer.
- V40P automatic air vent to prevent unnecessary heat loss.



**FPW-V**  
preSelect

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with white acrylic paint.
- V40P automatic air vent to prevent unnecessary heat loss.

### TOP HUNG ROOF WINDOWS IN NATURAL PINE AND WHITE ACRYLIC FINISH

windows external dimensions [cm]	55x98	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x118	114x140	134x98
effective glazing area [m <sup>2</sup> ]	0.29	0.38	0.47	0.47	0.59	0.72	0.82	0.75	0.92	0.95	1.16	0.92
size symbol	02	03	04	05	06	07	13	08	09	10	11	12
<b>NATURAL PINE</b> <b>FPP-V P2 preSelect</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£453	£474	£474	£500	£553	£610	£600	£647	£665	£719	£637	£686
<b>WHITE ACRYLIC</b> <b>FPW-V P2 preSelect</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£453	£474	£474	£500	£553	£610	£600	£647	£665	£719	£637	£686

NOTE- OBSCURE E GLAZED (02) AVAILABLE TO ORDER – PLEASE CONTACT FAKRO SALES OFFICE FOR FURTHER DETAILS



A unique,  
innovatory hinge system

### STANDARD FLASHING KITS FOR USE WITH TOP HUNG ROOF WINDOWS

windows external dimensions [cm]	55x98	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x118	114x140	134x98
size symbol	02	03	04	05	06	07	13	08	09	10	11	12
<b>EZV-A</b> for interlocking tiles up to 45mm profile	£82	£93	£93	£96	£96	£98	£98	£100	£105	£114	£116	£119
<b>ELV</b> for non-interlocking slate up to 10mm thick	£82	£93	£93	£96	£96	£98	£98	£100	£105	£114	£116	£119
<b>EPV</b> for plain tiles up to 16mm thick	£82	£93	£93	£96	£96	£98	£98	£100	£105	£114	£116	£119
<b>EHN-A</b> for interlocking tiles up to 90mm profile	£91	£96	£100	£100	£105	£105	£120	£107	£110	£116	£119	£121

**FULL FLASHING KIT**  
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\* ALL WINDOWS AVAILABLE IN NON VENTED ON REQUEST

## TOP HUNG AND PIVOT DUAL FUNCTION - preSelect

IN WHITE POLYURETHANE FINISH

- Top hung and pivot windows come with two independent opening mechanisms.
- The sash can be opened outwards from the top and via centre pivot.
- Innovative hardware system guarantees complete sash stability in both opening functions.
- Opening method can be switched using preSelect sliding switch placed in the side part of the frame which is accessible after opening the window.
- Windows turn through 180° to clean outer pane within the room.
- Suitable for pitches from 15° - 55° (or non-standard option for opening from 15° - 85°)



### FPU-V preSelect

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with white polyurethane paint.
- V40P automatic air vent to prevent unnecessary heat loss

#### TOP HUNG ROOF WINDOWS IN WHITE POLYURETHANE AND PVC FINISH

windows external dimensions [cm]	55x98	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x118	114x140	134x98
effective glazing area [m <sup>2</sup> ]	0.29	0.38	0.47	0.47	0.59	0.72	0.82	0.75	0.92	0.95	1.16	0.92
size symbol	02	03	04	05	06	07	13	08	09	10	11	12
<b>WHITE POL.</b> <b>FPU-V P2 preSelect</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	<b>£510</b>	<b>£499</b>	<b>£556</b>	<b>£520</b>	<b>£588</b>	<b>£650</b>	<b>£730</b>	<b>£606</b>	<b>£759</b>	<b>£780</b>	<b>£758</b>	<b>£723</b>

NOTE- OBSCURE E GLAZED (02) AVAILABLE TO ORDER – PLEASE CONTACT FAKRO SALES OFFICE FOR FURTHER DETAILS



A unique,  
innovatory hinge system

#### STANDARD FLASHING KITS FOR USE WITH TOP HUNG ROOF WINDOWS

windows external dimensions [cm]	55x98	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x118	114x140	134x98
size symbol	02	03	04	05	06	07	13	08	09	10	11	12
<b>EZV-A</b> for interlocking tiles up to 45mm profile	<b>£82</b>	<b>£93</b>	<b>£93</b>	<b>£96</b>	<b>£96</b>	<b>£98</b>	<b>£98</b>	<b>£100</b>	<b>£105</b>	<b>£114</b>	<b>£116</b>	<b>£119</b>
<b>ELV</b> for non-interlocking slate up to 10mm thick	<b>£82</b>	<b>£93</b>	<b>£93</b>	<b>£96</b>	<b>£96</b>	<b>£98</b>	<b>£98</b>	<b>£100</b>	<b>£105</b>	<b>£114</b>	<b>£116</b>	<b>£119</b>
<b>EPV</b> for plain tiles up to 16mm thick	<b>£82</b>	<b>£93</b>	<b>£93</b>	<b>£96</b>	<b>£96</b>	<b>£98</b>	<b>£98</b>	<b>£100</b>	<b>£105</b>	<b>£114</b>	<b>£116</b>	<b>£119</b>
<b>EHN-A</b> for interlocking tiles up to 90mm profile	<b>£91</b>	<b>£96</b>	<b>£96</b>	<b>£100</b>	<b>£100</b>	<b>£105</b>	<b>£105</b>	<b>£107</b>	<b>£110</b>	<b>£116</b>	<b>£119</b>	<b>£121</b>

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\* ALL WINDOWS AVAILABLE IN NON VENTED ON REQUEST



## TOP HUNG AND PIVOT DUAL FUNCTION - preSelect MAX

IN NATURAL PINE AND WHITE ACRYLIC FINISH

- A new generation top hung and pivot windows come with two independent opening mechanisms. The sash can be opened outwards from the top and via centre pivot.
- The outward opening function enables the sash to be opened in any position from 0° to 45° which allows an easy approach to the opened window. The pivot function enables the sash to be rotated through 180° and is used for cleaning the outer pane.
- Innovative hardware system guarantees complete sash stability in both opening functions.
- Opening method can be switched using preSelect sliding switch
- Suitable for pitches from 15° - 55° (or non-standard option for opening from 55° - 85°).



NEW

### FPP-V preSelect MAX

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with natural acrylic lacquer.
- V40P automatic air vent to prevent unnecessary heat loss.



NEW

### FPT preSelect MAX

- Highly energy-efficient windows that combine two features: high insulation performance (FTT) and top hung opening method (preSelect MAX).
- The FPT MAX is a wooden top hung and pivot preSelect MAX window in natural colour. Equipped as standard with a double chamber insulated (U6) or soundproof (R3) glazing unit. The window is produced without the air inlet (like FTT) using special wooden profiles and two peripheral seals.

#### WINDOWS WITH HIGHLY ENERGY-EFFICIENT TRIPLE GLAZING IN NATURAL PINE

windows external dimensions [cm]		55x78	55x98	55x118	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x98	114x118	114x140
effective glazing area [m²]		0.21	0.29	0.37	0.38	0.47	0.47	0.59	0.72	0.82	0.75	0.92	0.92	0.95	1.16
size symbol		01	02	16	03	04	05	06	07	13	08	09	20	10	11
NATURAL PINE	<b>FPP-V P2 preSelect MAX</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	-	£530	£500	£535	£555	£560	£600	£650	£750	£670	£710	£720	£760	£765
	<b>FPP-V P5 preSelect MAX</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	-	£689	£900	£689	£706	£706	£746	£797	£1320	£825	£893	£1250	£1250	£1380
	<b>FPT U6 preSelect MAX</b> U6 - High energy efficient triple glazed unit. U-value of window 0.80	-	£750	£800	£805	£830	£820	£900	£970	£1040	£968	£1060	£1450	£1070	£1200
WHITE ACRYLIC	<b>FPW-V P2 preSelect MAX</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	-	£530	£500	£535	£555	£560	£600	£650	£750	£670	£710	£720	£760	£765
	<b>FPW-V P5 preSelect MAX</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	-	£689	£900	£689	£706	£706	£746	£797	£1320	£825	£893	£1250	£1250	£1380
WHITE POL.	<b>FPU-V P2 preSelect MAX</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	-	£590	N/A	£620	£635	£650	£690	£730	£830	£760	£780	£770	£820	£860
	<b>FPU-V P5 preSelect MAX</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	-	£755	£950	£782	£782	£819	£878	£915	-	£969	£923	£1200	-	-

#### STANDARD FLASHING KITS FOR USE WITH TRIPLE GLAZED WINDOWS

windows external dimensions [cm]	55x78	55x98	55x118	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x98	114x118	114x140
size symbol	01	02	16	03	04	05	06	07	13	08	09	20	10	11
<b>EZV-A</b> for interlocking tiles up to 45mm profile	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£115	£114	£116
<b>ELV</b> for non-interlocking slate up to 10mm thick	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£115	£114	£116
<b>EPV</b> for plain tiles up to 16mm thick	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£115	£114	£116
<b>EHN-A</b> for interlocking tiles up to 90mm profile	£84	£91	£96	£96	£100	£100	£105	£105	£120	£107	£110		£116	£119

FULL FLASHING KIT  
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\* ALL WINDOWS AVAILABLE IN NON VENTED ON REQUEST



## TOP HUNG AND PIVOT DUAL FUNCTION - preSelect MAX

IN WHITE ACRYLI AND WHITE POLYURETHANE FINISH

- A new generation top hung and pivot windows come with two independent opening mechanisms. The sash can be opened outwards from the top and via centre pivot.
- The outward opening function enables the sash to be opened in any position from 0° to 45° which allows an easy approach to the opened window. The pivot function enables the sash to be rotated through 180° and is used for cleaning the outer pane.
- Innovative hardware system guarantees complete sash stability in both opening functions.
- Opening method can be switched using preSelect sliding switch
- Suitable for pitches from 15° - 55° (or non-standard option for opening from 55° - 85°).
- Ideal for bathrooms, wetrooms, kitchens and environments with increased humidity.



NEW

**FPW-V**  
preSelect MAX

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with white acrylic paint.
- V40P automatic air vent to prevent unnecessary heat loss.



NEW

**FPU-V**  
preSelect MAX

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with white polyurethane paint.
- V40P automatic air vent to prevent unnecessary heat loss.



A unique,  
innovatory hinge system

114x160	134x98	134x118	134x140	94x160
1,32	0,92	1,15	1,40	0,75
50	12	18	17	80
£890	£785	£795	£805	£790
£1580	£1320	£1450	£1520	£1450
£1280	-	£1200	£1300	£1150
£890	£785	£795	£805	£790
£1580	£1320	£1450	£1520	£1450
£890	£830	£880	£880	£880
-	-	-	-	-

114x160	134x98	134x118	134x140	94x160
50	12	18	17	80
£130	£119	£127	£123	£121
£130	£119	£127	£123	£121
£130	£119	£127	£123	£121
£133	£121	£129	£130	£123

## WINDOWS WITH ELECTRIC/Z-WAVE/SOLAR CONTROL

IN NATURAL PINE AND WHITE ACRYLIC FINISH

- Traditional centre pivot operation.
- Electrically operated pivot roof windows equipped with the Z-Wave system as standard.
- Integrated window control mechanism (actuator and power supply) is situated under an aesthetic aluminium cover fitted in the lower part of the frame.
- Solar pivot window, electrically operated equipped as standard like Z-Wave windows with an additional solar panel to power the window.
- Actuator with a reach of 24 cm makes it possible to open and close the sash.
- Built-in ZRD rain sensor automatically initiates the sash closing function when the first rain drops appear.
- Suitable for pitches from 15-90°.



**FTP-V  
Z-Wave**



**FTP-V  
Solar**

**NEW**



**FTW-V  
Z-Wave**



**FTW-V  
Solar**

**NEW**

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with natural acrylic lacquer.
- V40P automatic air vent to prevent unnecessary heat loss.

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with white acrylic paint.
- V40P automatic air vent to prevent unnecessary heat loss.

### WINDOWS WITH ELECTRIC Z-WAVE/SOLAR CONTROL IN NATURAL PINE AND WHITE ACRYLIC FINISH

windows external dimensions [cm]		55x78	55x98	55x118	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x118	114x140	134x98	94x160
effective glazing area [m²]		0.21	0.29	0.37	0.38	0.47	0.47	0.59	0.72	0.82	0.75	0.92	0.95	1.16	0.92	0.75
size symbol		01	02	16	03	04	05	06	07	13	08	09	10	11	12	80
NATURAL PINE	<b>FTP-V P2 Z-Wave</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£624	£640	£653	£671	£688	£666	£708	£746	£905	£814	£814	£827	£858	£807	£858
	<b>FTP-V P5 Z-Wave</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£809	£825	£837	-	£873	£850	£892	£931	-	£966	£999	-	-	-	-
	<b>FTP-V P2 Solar</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£640	£660	£690	£700	£720	£725	£775	£790	£890	£810	£825	£825	£865	£840	-
	<b>FTP-V P5 Solar</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£815	£831	£842	£840	£877	£855	£895	£931	£1024	£945	£996	-	-	-	-
WHITE ACRYLIC	<b>FTW-V P2 Z-Wave</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£624	£640	£653	£671	£688	£666	£708	£746	£905	£814	£814	£827	£858	£807	£858
	<b>FTW-V P5 Z-Wave</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£809	£825	£837	-	£873	£850	£892	£931	-	£966	£999	-	-	-	-
	<b>FTW-V P2 Solar</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£640	£660	£690	£700	£720	£725	£775	£790	£890	£810	£825	£825	£865	£840	-
	<b>FTW-V P5 Solar</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£815	£831	£842	£840	£877	£855	£895	£931	£1024	£945	£996	£1009	-	£990	-

### STANDARD FLASHING KITS FOR USE WITH Z-WAVE ELECTRIC WINDOWS

windows external dimensions [cm]	55x78	55x98	55x118	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x118	114x140	134x98	94x160
size symbol	01	02	16	03	04	05	06	07	13	08	09	10	11	12	80
<b>EZV-A</b> for interlocking tiles up to 45mm profile	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>ELV</b> for non-interlocking slate up to 10mm thick	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>EPV</b> for plain tiles up to 16mm thick	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>EHN-A</b> for interlocking tiles up to 90mm profile	£84	£91	£96	£96	£100	£100	£105	£105	£120	£107	£110	£116	£119	£121	£123

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\* ALL WINDOWS AVAILABLE IN NON VENTED ON REQUEST

## WINDOWS WITH ELECTRIC /Z-WAVE /SOLAR CONTROL

IN WHITE POLYURETHANE FINISH

- Traditional centre pivot operation.
- Electrically operated pivot roof windows equipped with the Z-Wave system as standard.
- Integrated window control mechanism (actuator and power supply) is situated under an aesthetic aluminium cover fitted in the lower part of the frame.
- Solar pivot window, electrically operated equipped as standard like Z-Wave windows with an additional solar panel to power the window.
- Actuator with a reach of 24 cm makes it possible to open and close the sash.
- Built-in ZRD rain sensor automatically initiates the sash closing function when the first rain drops appear.
- Suitable for pitches from 15-90°.



**FTU-V**  
**Z-Wave**

**FTU-V**  
**Solar**

**NEW**

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with white polyurethane paint.
- V40P automatic air vent to prevent unnecessary heat loss.

### WINDOWS WITH ELECTRIC Z-WAVE CONTROL IN WHITE POLYURETHANE AND PVC FINISH

windows external dimensions [cm]		55x78	55x98	55x118	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x118	114x140	134x98	94x160
effective glazing area [m <sup>2</sup> ]		0.21	0.29	0.37	0.38	0.47	0.47	0.59	0.72	0.82	0.75	0.92	0.95	1.16	0.92	0.75
size symbol		01	02	16	03	04	05	06	07	13	08	09	10	11	12	80
WHITE POLYURETHANE	<b>FTU-V P2 Z-Wave</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£694	£714	£730	£748	£774	£746	£798	£847	£935	£869	£931	£947	£946	£923	£992
	<b>FTU-V P5 Z-Wave</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£855	£884	£907	£920	£972	£931	£1007	£1077	-	£1069	£1200	-	-	-	-
	<b>FTU-V P2 Solar</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£680	£700	£740	£750	£760	£770	£820	£845	£900	£855	£885	£885	£915	£885	-
	<b>FTU-V P5 Solar</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£847	£864	£876	£893	£924	£903	£930	£1008	-	£1034	£1036	-	-	-	-

### STANDARD FLASHING KITS FOR USE WITH Z-WAVE ELECTRIC WINDOWS

windows external dimensions [cm]	55x78	55x98	55x118	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x118	114x140	134x98	94x160
size symbol	01	02	16	03	04	05	06	07	13	08	09	10	11	12	80
<b>EZV-A</b> for interlocking tiles up to 45mm profile	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>ELV</b> for non-interlocking slate up to 10mm thick	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>EPV</b> for plain tiles up to 16mm thick	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>EHN-A</b> for interlocking tiles up to 90mm profile	£84	£91	£96	£96	£100	£100	£105	£105	£120	£107	£110	£116	£119	£121	£123

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\* ALL WINDOWS AVAILABLE IN NON VENTED ON REQUEST

# Choose **ECO**-logically

## ECO-FRIENDLY ALUMINIUM CLAD-PLASTIC WINDOWS

### WHY FAKRO ECO-FRIENDLY PVC WINDOWS?

Our PVC roof windows are eco-friendly products. The frame profiles are made of as much as 63% recycled material. In addition, materials used to manufacture windows such as glass, PVC profiles, aluminium and steel components can be reused virtually in 100%.

Applying recycled components in the production process significantly cuts down the amount of waste and helps reduce the need for fossil fuels such as crude oil.

**Windows ensure an abundance of natural light within the attic space**, which makes us happy to be there, feel good and want to live.

**They stand behind safety and peace of mind for many years to come.** Windows are durable and resistant to adverse weather conditions. The material they are made of does not absorb moisture and does not need to be painted, while the glass is covered by a lifetime hail warranty.

**Windows prevent energy loss in the winter, which allows us to save on heating.** They come with triple-glazed units, while their installation with Thermo flashings improves the heat transfer coefficient by up to 15%.

**They can be fitted in any room**, including living rooms, bedrooms, children's rooms and spaces with elevated humidity levels such as kitchens and bathrooms.

**They work well both for new investments and as replacement windows.** Popular roof windows can be replaced without harm to the lining, while the whole process is quick and easy.

### CHOOSE YOUR COLOUR

Our windows can be perfectly matched to any interior. They are available in **classic white** as well as in attractive veneers such as **pine** and **golden oak** that resemble natural wood.

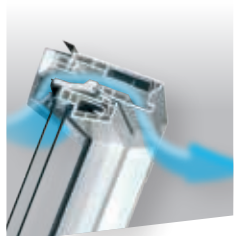


Please contact fakro sales office for further details.



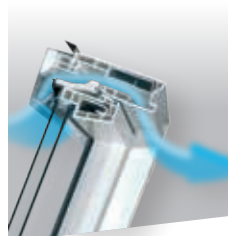
## CENTRE PIVOT WINDOWS - PVC

- Traditional centre pivot operation.
- Ideal for bathrooms, wetrooms, kitchens and environments with increased humidity.
- Windows turn through 180° to clean outer pane within the room.
- Operating handle in the base of the sash for ease of use.
- Suitable for retro-fitting of electronic operation.
- Suitable for pitches from 15-90°.
- Windows equipped with highly energy-efficient double chamber glazing unit and internal glass laminated, anti-burglary class P2A. The window is particularly recommended for buildings where special emphasis is put on thermal energy savings.



**PTP-V**

- PVC profile with steel reinforcement for a smooth, wipe clean finish.
- Available in white, golden oak or natural pine veneer finishes. Golden oak and pine POA.
- V35 air inlet.



**PTP-V  
Z-Wave**

- PVC profile with steel reinforcement for a smooth, wipe clean finish.
- Available in white, golden oak or natural pine veneer finishes.
- V35 air inlet.

### WINDOWS WITH ELECTRIC Z-WAVE CONTROL IN PVC FINISH

windows external dimensions [cm]		55x78	55x98	55x118	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x118	114x140	134x98	94x160
effective glazing area [m²]		0.21	0.29	0.37	0.38	0.47	0.47	0.59	0.72	0.82	0.75	0.92	0.95	1.16	0.92	0.75
size symbol		01	02	16	03	04	05	06	07	13	08	09	10	11	12	80
PVC	<b>PTP-V P2</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£320	£336	£354	£349	£391	£367	£416	£461	£514	£469	£537	£552	£539	£529	£529
	<b>PTP-V P5</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 1.1	£537	£576	£598	£598	£643	£643	£693	£782	-	£793	£826	-	-	-	-
PVC	<b>PTP-V P2 Z-Wave</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£757	£775	£787	£793	£805	£805	£834	£887	£935	£893	£1100	£1118	£1142	£1106	£994
	<b>PTP-V P5 Z-Wave</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 1.1	£1018	£1042	£1058	£1067	£1107	£1107	£1156	-	-	-	-	-	-	-	-

NOTE- OBSCURE E GLAZED (02) AVAILABLE TO ORDER – PLEASE CONTACT FAKRO SALES OFFICE FOR FURTHER DETAILS

### STANDARD FLASHING KITS FOR CENTRE PIVOT ROOF WINDOWS

windows external dimensions [cm]	55x78	55x98	55x118	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x118	114x140	134x98	94x160
size symbol	01	02	16	03	04	05	06	07	13	08	09	10	11	12	80
<b>EZV-A</b> for interlocking tiles up to 45mm profile	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>ELV</b> for non-interlocking slate up to 10mm thick	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>EPV</b> for plain tiles up to 16mm thick	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>EHN-A</b> for interlocking tiles up to 90mm profile	£84	£91	£96	£96	£100	£100	£105	£105	£120	£107	£110	£116	£119	£121	£123

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\* ALL WINDOWS AVAILABLE IN NON VENTED ON REQUEST



## TOP HUNG AND PIVOT DUAL FUNCTION - preSelect - PVC

- A new generation top hung and pivot windows come with two independent opening mechanisms. The sash can be opened outwards from the top and via centre pivot.
- The outward opening function enables the sash to be opened in any position from 0° to 35° (preSelect) and 0° to 45° (preSelect MAX) which allows an easy approach to the opened window. The pivot function enables the sash to be rotated through 180° and is used for cleaning the outer pane.
- Innovative hardware system guarantees complete sash stability in both opening functions.
- Opening method can be switched using preSelect sliding switch
- Suitable for pitches from 15° - 55° (or non-standard option for opening from 55° - 85°).
- Ideal for bathrooms, wetrooms, kitchens and environments with increased humidity.



**PPP-V  
preSelect**

- PVC profile with steel reinforcement for a smooth, wipe clean finish.
- Available in White, Golden Oak or Natural Pine veneer finishes
- V35 air inlet



**NEW**

**PPP-V  
preSelect MAX**

- PVC profile with steel reinforcement for a smooth, wipe clean finish.
- Available in white, golden oak or natural pine veneer finishes.
- V35 air inlet.

### TOP HUNG ROOF WINDOWS IN PVC FINISH

windows external dimensions [cm]	55x98	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x118	114x140	134x98
effective glazing area [m <sup>2</sup> ]	0.29	0.38	0.47	0.47	0.59	0.72	0.82	0.75	0.92	0.95	1.16	0.92
size symbol	02	03	04	05	06	07	13	08	09	10	11	12
<b>PVC</b> <b>PPP-V P2 preSelect</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£559	£565	£590	£590	£635	£687	-	£712	£744	£763	£845	-

NOTE- OBSCURE E GLAZED (02) AVAILABLE TO ORDER – PLEASE CONTACT FAKRO SALES OFFICE FOR FURTHER DETAILS

### TOP HUNG ROOF WINDOWS IN PVC FINISH- MAX VERSION

windows external dimensions [cm]	55x78	55x98	55x118	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x98	114x118	114x140
effective glazing area [m <sup>2</sup> ]	0.21	0.29	0.37	0.38	0.47	0.47	0.59	0.72	0.82	0.75	0.92	0.92	0.95	1.16
size symbol	01	02	16	03	04	05	06	07	13	08	09	20	10	11
<b>PVC</b> <b>PPP-V P5 preSelect MAX</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 1.1	-	£825	£920	£825	£876	£876	£946	£1016	£1200	£1150	£1250	£1100	£1300	£1350

windows external dimensions [cm]	114x160	134x98	134x118	134x140	94x160
effective glazing area [m <sup>2</sup> ]	1.32	0.92	1.15	1.40	0.75
size symbol	50	12	18	17	80
<b>PVC</b> <b>PPP-V P5 preSelect MAX</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 1.1	-	£1200	£1400	£1500	-

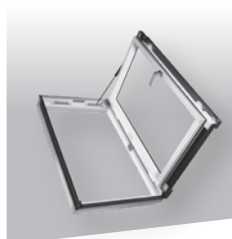
### STANDARD FLASHING KITS FOR CENTRE PIVOT ROOF WINDOWS

windows external dimensions [cm]	55x78	55x98	55x118	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x118	114x140	134x98	94x160
size symbol	01	02	16	03	04	05	06	07	13	08	09	10	11	12	80
<b>EZV-A</b> for interlocking tiles up to 45mm profile	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>ELV</b> for non-interlocking slate up to 10mm thick	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>EPV</b> for plain tiles up to 16mm thick	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>EHN-A</b> for interlocking tiles up to 90mm profile	£84	£91	£96	£96	£100	£100	£105	£105	£120	£107	£110	£116	£119	£121	£123



## UNIVERSAL ESCAPE WINDOWS - PVC

- The universal escape windows is side hung and therefore side-opening. Once unlocked, the sash can be opened to 90°.
- Gas piston fitted in the top part of the window makes opening easier, holds the sash stable when opened and prevents against accidental closure.
- The universal design of side hung escape windows. Before proceeding to installation it is possible to change the opening side. Windows are delivered with factory pre-fixed right opening side. It is possible to order the PWP model – left.
- Suitable for pitches from 15° - 55°.
- Available in conservation style.



### PWP

- PVC profile with steel reinforcement for a smooth, wipe clean finish.

#### SIDE HUNG ESCAPE WINDOW

windows external dimensions [cm]	55x98*	66x78	66x98	66x118	78x98	78x118
effective glazing area [m <sup>2</sup> ]	0.29	0.28	0.38	0.47	0.47	0.59
size symbol	02	22	03	04	05	06
<b>PVC</b> <b>PWP P2</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.4	£580	£580	£580	£605	£742	-

#### FLASHINGS FOR SIDE HUNG ESCAPE WINDOW

windows external dimensions [cm]	55x98	66x78	66x98	66x118	78x98	78x118
size symbol	02	22	03	04	05	06
<b>EZV-A</b> for interlocking tiles up to 45mm profile	£82	£112	£93	£96	£96	£98
<b>ELV</b> for non-interlocking slate up to 10mm thick	£82	£112	£93	£96	£96	£98
<b>EPV</b> for plain tiles up to 16mm thick	£82	£112	£93	£96	£96	£98
<b>EHN-A</b> for interlocking tiles up to 90mm profile	£91	£115	£96	£100	£100	£105

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\* ALL WINDOWS AVAILABLE IN NON VENTED ON REQUEST



## ► Z-WAVE ELECTRICAL CONTROL ELEMENTS

Z-Wave - radio control - each window comes complete with a ZRH12 remote control and rain sensor and allows the operation of both internal and external accessories. A weather module can also be fitted to the system if required. The Z-Wave window is compatible with similar z-wave products and can be linked to a home intelligence system.

A bridge module allows the user to operate roof windows and both internal and external accessories by means of another control system. The range of Z-Wave products also includes external accessories in the solar version which are excellent solution to be applied in places where providing power supply is problematic.



**ZWS12**

**£300**

**ZWS230**

**£333**

### **ZWS 12 ZWS 230**

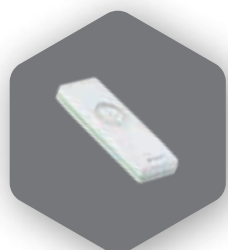
- Z-Wave motor used for operating windows (controller and ZZ60 power supply have to be bought separately).



**£122**

### **ZRW7**

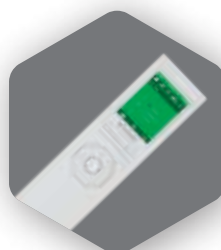
- Z-Wave wall keyboard control can operate up to 12 of FAKRO Z-Wave devices in each of the seven groups.



**£117**

### **ZRH12**

- Designed for all FAKRO Z-Wave devices, also in the SOLAR version. This can control up to 12 devices in 12 groups using an ergonomic joystick.



**£200**

### **ZRS24**

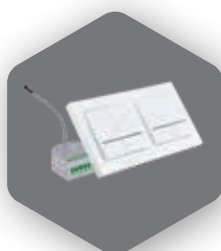
- Multifunctional Z-Wave remote enabling advanced configuration and control all devices on the Z-Wave devices.



**£156**

### **ZWL 1**

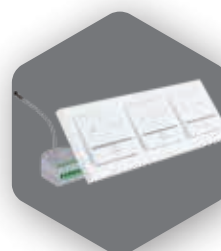
- Button and radio module installed in flush mounted box, used for remote control of single Z-Wave receiver or in groups.



**£156**

### **ZWL 2**

- Button and radio module installed in flush mounted box, used for remote control of two Z-Wave receiver or two groups of FAKRO Z-Wave devices.



**£165**

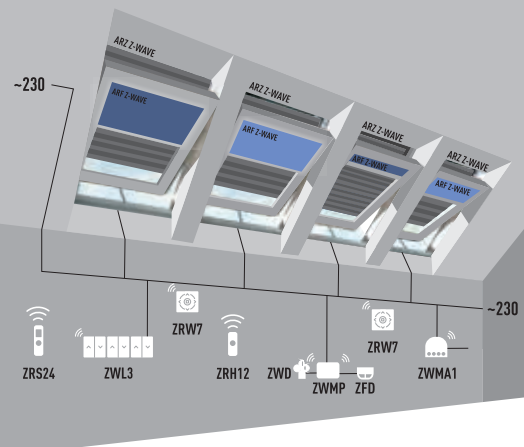
### **ZWL 3**

- Button and radio module installed in flush mounted box, used for remote control of three Z-Wave receiver or two groups of FAKRO Z-Wave devices.

FOR FURTHER ADVICE ON ELECTRICAL COMPONENTS PLEASE REFER TO THE FOLLOWING LINK  
[FAKRO.CO.UK/INSTALLINGELECTRICBLINDS](http://FAKRO.CO.UK/INSTALLINGELECTRICBLINDS)



## SAMPLE USE OF FAKRO Z-WAVE PRODUCTS



The Z-Wave roof windows are connected to 230V AC. A remote control with an ergonomic joystick operates windows individually or simultaneously. Wall keyboards and radio switches act as additional controllers. Detectors close windows when it starts raining. Weather module in cooperation with wind and smoke detectors are responsible for the safety of the building. Internal and external accessories are connected to Z-Wave windows that are factory equipped with electrical wiring. Shutters are assigned to a remote control and wall switch.

An advanced controller with a display triggers scenes. Another system (eg emergency) manages windows in cooperation with a bridge module.



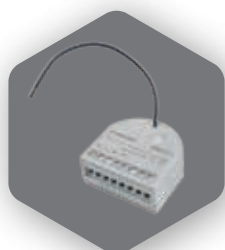
**ZZ 60**      **ZZ 60H**

£114

£114

### ZZ 60 ZZ 60H

- Impulse power supply 15VDC to power electric receivers (available in hermetic casing ZZ60h)



£104

### ZWMA1

- A Z-Wave adaption module used to control one receiver separately or in groups by use of wall button or other control system (230V AC).



£206

### ZWMA4

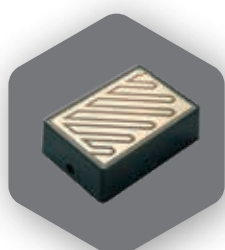
- Z-Wave adaption module used to control up to four receivers separately or in groups by the use of wall button or other control system (230V AC).



£159

### ZWMP

- Weather module used to control Z-Wave receivers by the use of rain sensor ZRD, wind sensor ZWD or smoke sensor ZFD.



£89

### ZRD

- Sensor in co-operation with ZWMP module, in case of rainfall ensures automatic closing of Z-Wave windows.



£72

### ZWD

- Sensor in co-operation with ZWMP module, in case of strong gusts of wind automatically closes Z-Wave windows.



£99

### ZFD

- Sensor in co-operation with ZWMP module, in case of detecting visible smoke, automatically opens Z-Wave windows.



## WINDOWS WITH WIFI CONTROL

- Traditional centre pivot operation.
- Electrically operated pivot roof windows equipped with the WiFi system as standard.
- Integrated window control mechanism (actuator and power supply) is situated under an aesthetic aluminium cover fitted in the lower part of the frame.
- Actuator with a reach of 24 cm makes it possible to open and close the sash.
- Suitable for pitches from 15-90°.



**FTP-V  
WiFi**

**NEW**

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with natural acrylic lacquer.
- V40P automatic air vent to prevent unnecessary heat loss.



**FTW-V  
WiFi**

**NEW**

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with white acrylic paint.
- V40P automatic air vent to prevent unnecessary heat loss.



**FTU-V  
WiFi**

**NEW**

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with white polyurethane paint.
- V40P automatic air vent to prevent unnecessary heat loss.

### WINDOWS WITH ELECTRIC WIFI CONTROL

windows external dimensions [cm]		55x78	55x98	55x118	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x118	114x140	134x98	94x160
effective glazing area [m²]		0.21	0.29	0.37	0.38	0.47	0.47	0.59	0.72	0.82	0.75	0.92	0.95	1.16	0.92	0.75
size symbol		01	02	16	03	04	05	06	07	13	08	09	10	11	12	80
NATURAL PINE	<b>FTP-V P2 WiFi</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£788	£819	£856	£866	£887	£898	£961	£977	-	£1003	£1024	£1034	£1076	£1050	£1092
	<b>FTP-V P5 WiFi</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£984	£1024	£1070	£1083	£1109	£1122	£1201	£1221	-	£1253	£1280	-	-	-	-
WHITE ACRYLIC	<b>FTW-V P2 WiFi</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£788	£819	£856	£866	£887	£898	£961	£977	-	£1003	£1024	£1034	£1076	£1050	£1092
	<b>FTW-V P5 WiFi</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£984	£1024	£1070	£1083	£1109	£1122	£1201	£1221	-	£1253	£1280	-	-	-	-
WHITE POLYURETHANE	<b>FTU-V P2 WiFi</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£866	£901	£941	£953	£976	£988	£1057	£1074	£1208	£1103	£1126	£1138	£1184	£1155	£1208
	<b>FTU-V P5 WiFi</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£1083	£1126	£1177	£1191	£1220	£1234	£1321	£1343	-	£1379	-	-	-	-	-

### STANDARD FLASHING KITS FOR USE WITH Z-WAVE ELECTRIC WINDOWS

windows external dimensions [cm]	55x78	55x98	55x118	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x118	114x140	134x98	94x160
size symbol	01	02	16	03	04	05	06	07	13	08	09	10	11	12	80
<b>EZV-A</b> for interlocking tiles up to 45mm profile	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>ELV</b> for non-interlocking slate up to 10mm thick	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>EPV</b> for plain tiles up to 16mm thick	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>EHN-A</b> for interlocking tiles up to 90mm profile	£84	£91	£96	£96	£100	£100	£105	£105	£120	£107	£110	£116	£119	£121	£123

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\* ALL WINDOWS AVAILABLE IN NON VENTED ON REQUEST

## WIFI ELECTRICAL CONTROL ELEMENTS



The  $\mu$ WiFi technology is a solution dedicated to all Smart Home devices. It features interference resistance, high throughput and the option of connection to existing infrastructure networks based on standard WiFi Access Points. The  $\mu$ WiFi technology allows for connections with all devices directly and using the existing WiFi network (eg. private homes, businesses). In addition, the cloud architecture provided by Blebox.eu enables the user to control devices from anywhere in the world via the Internet - only a WiFi network with Internet access is required. The  $\mu$ WiFi system is easy to install, expand and manage. It can be used at any stage of the building's operation. WiFi products work with the Google Assistant through the wBox app which allows to create a virtual Google Home and voice control of FAKRO WiFi products.



£85

### UREMOTE WIFI

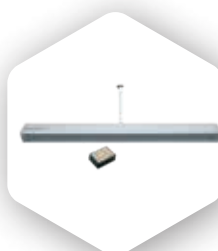
- Designed for all FAKRO WiFi devices.
- Equipped with a multicolor LED diode.
- It is powered by a built-in battery, charged via a micro-USB connector.
- This can control up to 3 devices in 4 groups.



£310

### ZFC

- Control unit for for easy transforming FAKRO electro centre pivot window to WiFi system. Controls the window actuator, roller shutter external and internal roller shutter. Possibility to connect a rain sensor.



£650

### ZFZ 230 ZRD

- Update kit for easy transforming hand open window to WiFi operating window. Dedicated to all FAKRO centre pivot windows. The kit Includes actuator, power supply, rain sensor.

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\* ALL WINDOWS AVAILABLE IN NON VENTED ON REQUEST

## HIGH ENERGY-EFFICIENT PIVOT WINDOWS

### IN NATURAL PINE

- Pivot windows featuring a specialist and innovatory design.
- Windows turn through 180° to clean outer pane within the room.
- Operating handle in the base of the sash for ease of use.
- Suitable for pitches from 15° - 70°.



**FTT U8  
Thermo**

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with natural acrylic lacquer.
- Quadruple glazed and fivefold seal airtight construction.
- Supplied complete with thermal flashing and XDK insulation kit.



**FTT U6**

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with natural acrylic lacquer.
- Triple glazed and fivefold seals.

### HIGHLY ENERGY - EFFICIENT WINDOWS NON VENTED - NATURAL PINE

windows external dimensions [cm]		55x78	55x98	55x118	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x118	114x140	134x98	94x160
effective glazing area [m <sup>2</sup> ]		0.21	0.29	0.37	0.38	0.47	0.47	0.59	0.72	0.82	0.75	0.92	0.95	1.16	0.92	0.75
size symbol		01	02	16	03	04	05	06	07	13	08	09	10	11	12	80
NATURAL PINE	<b>FTT U8 Thermo</b> U8 - Passive quadruple glazed unit. U-value of window 0.58*	-	£1261	£1325	£1342	£1408	£1418	£1578	£1745	£2029	£1817	£1874	£1892	£2125	£1927	£2300
	<b>FTT U6</b> U6 - High energy efficient triple glazed unit. U-value of window 0.80	-	£729	£762	£762	£808	£808	£914	£1011	£1173	£1057	£1086	£1092	£1221	£1155	£1332

\*WINDOW U-VALUE WHEN INSTALLED WITH THERMAL FLASHING. PRICES AVAILABLE ON REQUEST FOR THERMAL FLASHINGS.

**NOTE – WHEN ORDERING THE FTT U8 WINDOW PLEASE STATE THE FLASHING KIT TYPE REQUIRED AS THEY ARE INCLUSIVE WITH THIS WINDOW.**

### STANDARD FLASHING KITS FOR USE WITH FTT U6

windows external dimensions [cm]	55x78	55x98	55x118	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x118	114x140	134x98	94x160
size symbol	01	02	16	03	04	05	06	07	13	08	09	10	11	12	80
<b>EZV-A</b> for interlocking tiles up to 45mm profile	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>ELV</b> for non-interlocking slate up to 10mm thick	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>EPV</b> for plain tiles up to 16mm thick	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>EHN-A</b> for interlocking tiles up to 90mm profile	£84	£91	£96	£96	£100	£100	£105	£105	£120	£107	£110	£116	£119	£121	£123

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**THERMO INSULATED FLASHING KITS ARE AVAILABLE FOR USE WITH THE FTT U6.  
SEE PAGE 34-35 FOR DETAILS**



## ► HIGH ENERGY EFFICIENT PIVOT WINDOWS

IN WHITE ACRYLIC AND WHITE POLYURETHANE FINISH

- Pivot windows featuring a specialist and innovatory design.
- Windows turn through 180° to clean outer pane within the room.
- Operating handle in the base of the sash for ease of use.
- Suitable for pitches from 15° - 70°.



**FTT/W U8**  
Thermo  
**FTT/U U8**  
Thermo



**FTT/W U6**  
**FTT/U U6**

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with white acrylic paint or white polyurethane varnish.
- Quadruple glazed and fivefold seal airtight construction.
- Supplied complete with thermal flashing and XDK insulation kit.

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with white acrylic paint or white polyurethane varnish.
- Triple glazed and fivefold seals.

### HIGHLY ENERGY - EFFICIENT WINDOWS NON VENTED - WHITE ACRYLIC AND WHITE POLYURETHANE FINISH

windows external dimensions [cm]		55x78	55x98	55x118	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x118	114x140	134x98	94x160
effective glazing area [m <sup>2</sup> ]		0.21	0.29	0.37	0.38	0.47	0.47	0.59	0.72	0.82	0.75	0.92	0.95	1.16	0.92	0.75
size symbol		01	02	16	03	04	05	06	07	13	08	09	10	11	12	80
WHITE ACRYLIC	<b>FTT/W U8 Thermo</b> U8 - Passive quadruple glazed unit. U-value of window 0.58*	-	£1302	£1368	£1383	£1451	£1463	£1626	£1798	£2092	£1874	£1931	£1948	£2188	£1980	£2368
	<b>FTT/W U6</b> U6 - High energy efficient triple glazed unit. U-value of window 0.80	-	£729	£762	£762	£808	£808	£914	£1011	£1173	£1057	£1086	£1092	£1221	£1155	£1332
WHITE POLYURETHANE	<b>FTT/U U8 Thermo</b> U8 - Passive quadruple glazed unit. U-value of window 0.58*	-	£1352	£1428	£1436	£1514	£1522	£1694	£1877	£2170	£1956	£2020	£2041	£2278	£2070	£2464
	<b>FTT/U U6</b> U6 - High energy efficient triple glazed unit. U-value of window 0.80	-	£800	£836	£836	£884	£884	£1005	£1108	£1289	£1159	£1193	£1200	£1357	£1228	£1466

\*WINDOW U-VALUE WHEN INSTALLED WITH THERMAL FLASHING. PRICES AVAILABLE ON REQUEST FOR THERMAL FLASHINGS.

**NOTE – WHEN ORDERING THE FTT U8 WINDOW PLEASE STATE THE FLASHING KIT TYPE REQUIRED AS THEY ARE INCLUSIVE WITH THIS WINDOW.**

### STANDARD FLASHING KITS FOR USE WITH FTT U6

windows external dimensions [cm]	55x78	55x98	55x118	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x118	114x140	134x98	94x160
size symbol	01	02	16	03	04	05	06	07	13	08	09	10	11	12	80
<b>EZV-A</b> for interlocking tiles up to 45mm profile	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>ELV</b> for non-interlocking slate up to 10mm thick	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>EPV</b> for plain tiles up to 16mm thick	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>EHN-A</b> for interlocking tiles up to 90mm profile	£84	£91	£96	£96	£100	£100	£105	£105	£120	£107	£110	£116	£119	£121	£123

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**THERMO INSULATED FLASHING KITS ARE AVAILABLE FOR USE WITH THE FTT U6.  
SEE PAGE 34-35 FOR DETAILS**



## WINDOWS WITH RAISED AXIS OF ROTATION – HIGH PIVOT proSky

IN NATURAL PINE, WHITE POLYURETHANE AND PVC FINISH

- Richly equipped pivot window with axis of rotation situated above the centre of the window, this gives more head space.
- The sash can be rotated through 160° and locked allowing safe and easy cleaning of the outer pane.
- Suitable for pitches from 20° - 65°.



**FYP-V  
proSky**

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with natural acrylic lacquer.
- V40P automatic air vent to prevent unnecessary heat loss.



**FYW-V  
proSky  
FYU-V  
proSky**

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with white acrylic paint or other white polyurethane paint.
- V40P automatic air vent to prevent unnecessary heat loss.

### WINDOWS WITH RAISED AXIS OF ROTATION – HIGH PIVOT proSky

windows external dimensions [cm]		78x160	78x180	78x206	94x160	94x180	94x206
effective glazing area [m <sup>2</sup> ]		0.85	0.92	1.19	1.07	1.22	1.46
size symbol		13	40	42	80	41	43
NATURAL PINE	<b>FYP-V P2 proSky</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£775	£847	£930	£878	£955	£1035
	<b>FYP-V P5 proSky</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£1159	£1278	£1384	-	£1449	-
WHITE ACRYLIC	<b>FYW-V P2 proSky</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£857	£949	£1026	£961	£1079	£1185
	<b>FYW-V P5 proSky</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£1211	£1370	£1503	-	£1555	-
WHITE POLYURETHANE	<b>FYU-V P2 proSky</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£883	£961	£1046	£994	£1113	£1219
	<b>FYU-V P5 proSky</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£1253	£1397	£1529	-	£1580	-

### FLASHING FOR USE WITH HIGH PIVOT proSky WINDOWS

windows external dimensions [cm]	78x160	78x180	78x206	94x160	94x180	94x206
size symbol	13	40	42	80	41	43
<b>EZV-A</b> for interlocking tiles up to 45mm profile	£127	£129	£160	£120	£155	£168
<b>ELV</b> for non-interlocking slate up to 10mm thick	£128	£129	£160	£120	£155	£168
<b>EPV</b> for plain tiles up to 16mm thick	£129	£129	£160	£120	£155	£168
<b>EHN-A</b> for interlocking tiles up to 90mm profile	£129	£142	£151	£125	£167	£195

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\* ALL WINDOWS AVAILABLE IN NON VENTED ON REQUEST



## WINDOWS WITH RAISED AXIS OF ROTATION – HIGH PIVOT Duet proSky

IN NATURAL PINE AND WHITE POLYURETHANE FINISH

- The upper sash is opened like a pivot window but its axis of rotation is situated above the centre of the window, this gives more head space.
- A duet proSky window eliminates the need for traditional vertical combinations, hence offering a greater illumination area.
- The sash can be rotated through 160° and locked allowing safe and easy cleaning of the outer pane.
- Suitable for pitches from 25° - 65°.



**FDY-V**  
Duet proSky

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with natural acrylic lacquer.
- V40P automatic air vent to prevent unnecessary heat loss.



**FDY-V/U**  
Duet proSky

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with white acrylic paint or white polyurethane varnish.
- V40P automatic air vent to prevent unnecessary heat loss.

### WINDOWS WITH RAISED AXIS OF ROTATION – HIGH PIVOT Duet proSky

windows external dimensions [cm]	78x206	78x235*	78x255	94x206	94x235	94x255
top sash dimensions [cm]	78x160	78x160	78x160	94x160	94x160	94x160
bottom sash dimensions [cm]	78x50	78x78	78x98	94x50	94x78	94x98
size symbol	CB	CC	CD	DB	DC	DD

NATURAL PINE

#### FDY-V P2 Duet proSky

P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3

£1091	£1268	£1325	£1175	£1351	£1410
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WHITE POLY.

#### FDY-V/U P2 Duet proSky

P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3

£1223	£1423	£1474	£1291	£1488	£1554
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### FOR USE WITH Duet proSky WINDOWS

windows external dimensions [cm]	78x206	78x235*	78x255	94x206	94x235	94x255
size symbol	CB	CC	CD	DB	DC	DD
EZV-A for interlocking tiles up to 45mm profile	£159	£174	£178	£178	£196	£212
ELV for non-interlocking slate up to 10mm thick	£159	£174	£178	£178	£196	£212
EPV for plain tiles up to 16mm thick	£159	£174	£178	£178	£196	£212
EHN-A for interlocking tiles up to 90mm profile	£172	£186	£189	£195	£215	£235

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\* ALL WINDOWS AVAILABLE IN NON VENTED ON REQUEST



## L-SHAPED COMBINATION WINDOWS

### IN NATURAL PINE

- Designed for installation in a vertical wall within the loft space (dwarf wall) to extend the roof window into the wall.
- Improved illumination of the room and enhanced field of view.
- Can be combined with roof windows of any design.
- The internal as well as external L-shaped windows' profiles match perfectly with the rest of FAKRO roof windows, creating the same decorative pattern.
- Wide range of additional accessories.
- Suitable for pitches from 15° - 55°.



**BDR (right)**  
**BDL (left)**

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with natural acrylic lacquer.
- Can be opened in tilt and turn. The sash can be tilted up to 11cm and opened up to 90°. Both opening methods are performed using one handle situated on the side of the sash. This window type comes with a lock as standard.



**BVP**

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with natural acrylic lacquer.
- In tilt opening function. The sash can be tilted up to 11cm. Handle with a lock placed in the top part of the sash.



**BXP**

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with natural acrylic lacquer.
- Is non-opening.

### L-SHAPED COMBINATION WINDOWS IN NATURAL PINE

windows external dimensions [cm]	78x60	78x75	78x95	78x115	78x137	94x75	94x95	114x75	114x95
effective glazing area [m <sup>2</sup> ]	0.25	0.33	0.45	0.57	0.71	0.42	0.58	0.53	0.73
size symbol	33	81	82	83	84	85	86	89	90

NATURAL PINE	- DOUBLE GLAZED									
	BDL P2, BDR P2 P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£618	£686	£743	£826	£914	£733	£813	N/A	£879
	BVP P2 P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£445	£467	£494	£556	£611	£519	£551	£553	£574
	BXP P2 P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£363	£378	£392	£437	£474	£407	£427	£494	£546
	- TRIPLE GLAZED									
	BDL P5, BDR P5 P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.88	£876	£950	£1038	£1149	£1267	£1028	£1136	N/A	£1223
	BVP P5 P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.88	£691	£727	£762	£867	£937	£809	£844	£855	£879
	BXP P5 P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.88	£640	£671	£695	£782	£851	£733	£770	£845	£907

### STANDARD FLASHING KITS FOR L-SHAPED COMBINATION

windows external dimensions [cm]	78x98	78x118	78x140	94x118	94x140	114x118	114x140	134x98
size symbol	05	06	07	08	09	10	11	12
<b>EUV-L/B</b> for slate	£219	£231	£248	£243	£246	£246	£256	£254
<b>EUV/B</b> for tiles	£228	£241	£252	£247	£252	£252	£264	£256





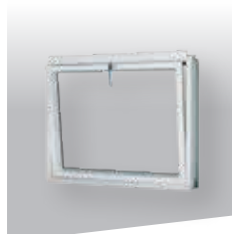
## L-SHAPED COMBINATION WINDOWS

IN WHITE ACRYLIC AND WHITE POLYURETHANE FINISH

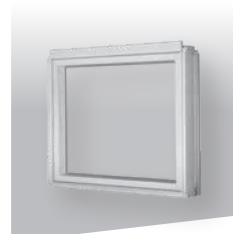
- Designed for installation in a vertical wall within the loft space (dwarf wall) to extend the roof window into the wall.
- Improved illumination of the room and enhanced field of view.
- Can be combined with roof windows of any design.
- The internal as well as external L-shaped windows' profiles match perfectly with the rest of FAKRO roof windows, creating the same decorative pattern.
- Wide range of additional accessories.
- Suitable for pitches from 15° - 55°.
- Sizes over 75x75 can be means of escape windows.



**BD\_/W**  
**BD\_/U**



**BVW**  
**BVU**



**BXW**  
**BXU**

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with white acrylic paint or white polyurethane varnish.
  - Can be opened in tilt and turn. The sash can be tilted up to 11cm and opened up to 90°. Both opening methods are performed using one handle situated on the side of the sash.
- This window type comes with a lock as standard.

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with white acrylic paint or white polyurethane varnish.
- In tilt opening function. The sash can be tilted up to 11cm. Handle with a lock placed in the top part of the sash.

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with white acrylic paint or white polyurethane varnish.
- Is non-opening.

### L-SHAPED COMBINATION WINDOWS IN WHITE ACRYLIC AND WHITE POLYURETHANE FINISH

windows external dimensions [cm]		78x60	78x75	78x95	78x115	78x137	94x75	94x95	114x75	114x95
effective glazing area [m²]		0.25	0.33	0.45	0.57	0.71	0.42	0.58	0.53	0.73
size symbol		33	81	82	83	84	85	86	89	90
WHITE ACRYLIC	- DOUBLE GLAZED									
	<b>BDL/W P2, BDR/W P2</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£655	£721	£782	£874	£959	£767	£851	N/A	£919
	<b>BVW P2</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£510	£524	£552	£619	£678	£579	£611	£611	£631
	<b>BXW P2</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£409	£428	£447	£503	£540	£466	£482	£559	£615
	- TRIPLE GLAZED									
	<b>BDL/W P5, BDR/W P5</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.88	£899	N/A	£1051	£1188	£1296	£1051	£1146	N/A	N/A
	<b>BVW P5</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.88	£782	£813	£869	£969	£1068	£907	£969	£956	£994
	<b>BXW P5</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.88	£684	£720	£757	£845	£919	£782	£820	£906	£969
	- DOUBLE GLAZED									
WHITE POLYURETHANE	<b>BDL/U P2, BDR/U P2</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£701	£739	£713	£892	£987	£790	£882	N/A	£950
	<b>BVU P2</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£507	£534	£564	£636	£700	£596	£631	£631	£651
	<b>BXU P2</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£441	£459	£479	£534	£584	£497	£524	£600	£662
	- TRIPLE GLAZED									
	<b>BDL/U P5, BDR/U P5</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.88	£933	£971	£959	£1234	£1353	£1093	£1212	N/A	£1217
	<b>BVU P5</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.88	£795	£845	£894	£1006	£1105	£931	£994	£994	£1018
	<b>BXU P5</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.88	£688	£724	£731	£845	£923	£785	£833	£905	£978

FLASHING KITS FOR L-SHAPED COMBINATION WINDOWS EUV-L/B & EUV/B- SEE PAGE 26 FOR DETAILS



## BALCONY WINDOW

IN NATURAL PINE AND WHITE POLYURETHANE FINISH

- The contemporary alternative to a dormer a far lower cost. The twin sash design has a lower element which opens to reveal built-in balustrades and an upper element which opens through 45° as a top hung window. When closed, balustrades are hidden below the window, the profile of which is undistinguishable from a standard Duet window. With no element above the roofline there is no risk of dirt accumulating.
- Use in combination with other roof windows using the K\_/G flashing.
- Suitable for pitches: 35° - 55° FGH-V P2, 40° - 55° FGH-V P5.



**FGH-V  
Galeria**

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with natural acrylic lacquer.
- V40P automatic air vent to prevent unnecessary heat loss.



**FGH-V/W  
Galeria**

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with white acrylic paint.
- V40P automatic air vent to prevent unnecessary heat loss.



**FGH-V/U  
Galeria**

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with white polyurethane varnish.
- V40P automatic air vent to prevent unnecessary heat loss.

### BALCONY WINDOW

windows external dimensions [cm]	78x255	94x255	114x255
top sash dimensions [cm]	78x160	94x160	114x160
bottom sash dimensions [cm]	78x98	94x98	114x98
size symbol	CD	DD	ED

NATURAL PINE	<b>FGH-V P2 Galeria</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.5	£2895	£2895	£3083
	<b>FGH-V P5 Galeria</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 1.1	£3459	£3459	-
WHITE ACRYLIC	<b>FGH-V/W P2 Galeria</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.5	£3053	£3053	£3382
	<b>FGH-V/W P5 Galeria</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 1.1	£3459	£3459	-
WHITE POLYURETHANE	<b>FGH-V/U P2 Galeria</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.5	£3067	£3067	£3633
	<b>FGH-V/U P5 Galeria</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 1.1	£3627	£3627	-

THE PRICE SHOWN FOR THE BALCONY WINDOW INCLUDES SINGLE FLASHING KIT  
- PLEASE CHOOSE WHICH KIT IS REQUIRED AT THE TIME OF ORDER FROM THE TABLE IN RIGHT.

### FLASHINGS FOR BALCONY WINDOW

windows external dimensions [cm]	78x255	94x255	114x255
size symbol	CD	DD	ED
<b>EZV-A/G</b> for interlocking tiles up to 45mm profile	✓	✓	✓
<b>ELV/G</b> for non-interlocking slate up to 10mm thick	✓	✓	✓
<b>EPV/G</b> for plain tiles up to 16mm thick	✓	✓	✓
<b>EHN-A/G</b> for interlocking tiles up to 90mm profile	✓	✓	✓



- Flashings E\_\_\_ / G are designed for balcony windows FGH-V Galeria. Flashings ensure a tight connection for the roof window in the roof slope. They are additionally marked with the letter G.
- Style flashing kits available:
  - ESV/G\* - for flat roof coverings up to 10mm thickness (2 x 5mm): roofing felt, shingles.
  - EHN-AT/G Thermo\* - universal flashing with an additional thermal insulation designed for the majority of roof coverings up to 90mm profile depth.
- Conservation style flashing kits are available.

\* prices available on request



## CONSERVATION STYLE WINDOWS

IN NATURAL PINE, WHITE ACRYLIC AND WHITE POLYURETHANE FINISH

- The FAKRO window with a mullion bar is designed for historic or stylised buildings. Its characteristic feature is black vertical mullion bar in the middle of the glazing, cladding and flashing (colour RAL 9005) which suits traditional construction.
- By using FAKRO windows with a mullion bar we can keep the unique, historic character of the building from the outside and create a comfortable and modern interior. Windows with a mullion bar feature all advantages of FAKRO roof windows. They are available in standard sizes in the following versions: pivot windows, top hung and pivot windows and roof access windows.
- Kits include window, flashing & undercollar felt.

windows external dimensions [cm]	55x78	55x98	55x118	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x118	114x140	134x98	94x160
effective glazing area [m <sup>2</sup> ]	0.21	0.29	0.37	0.38	0.47	0.47	0.59	0.72	0.82	0.75	0.92	0.95	1.16	0.92	0.75
size symbol	01	02	16	03	04	05	06	07	13	08	09	10	11	12	80

NATURAL PINE	CENTRE PIVOT ROOF WINDOWS															
	FTP-V/C P2 (V* Kit) P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£512	£527	£548	£585	£609	£613	£640	£691	£863	£764	£791	£808	£886	£807	£958
	FTP-V/C P2 (J* Kit) P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£536	£597	£618	£623	£684	£671	£718	£775	£913	£804	£859	£894	£943	£902	£1045
	FTP-V/C P2 P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£415	£445	£451	£475	£492	£497	£556	£603	£686	£620	£640	£660	£719	£732	£774
	FTP-V/C P5 P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£687	£742	£779	£781	£823	£826	£921	£1041	-	£1058	£1102	£1143	£1248	£1125	-
	FTP-V/C P2 Z-Wave P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£755	£797	£836	£838	£901	£914	£977	£1008	£1043	£1030	£1058	£1068	£1116	£1068	£1106
	FTP-V/C P5 Z-Wave P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£847	£889	£939	£943	£993	£1006	£1096	£1154	-	£1181	-	-	-	-	-
WHITE ACRYLIC	CENTRE PIVOT ROOF WINDOWS															
	FTW-V/C P2 (V*Kit) P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£516	£527	£548	£590	£609	£617	£640	£691	£871	£771	£796	£816	£888	£807	£958
	FTW-V/C P2 (J*Kit) P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£557	£597	£618	£646	£684	£696	£718	£775	£938	£832	£888	£915	£965	£902	£1073
	FTW-V/C P2 P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£422	£454	£459	£483	£501	£505	£567	£614	£698	£631	£651	£671	£732	£745	£787
	FTW-V/C P5 P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£642	£680	£727	£729	£769	£771	£859	£973	N/A	£989	£1030	£1030	£1165	£1050	N/A
	FTW-V/C P2 Z-Wave P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£761	£805	£842	£845	£911	£921	£987	£1018	£1054	£1040	£1068	£1081	£1128	£1081	£1120
	FTW-V/C P5 Z-Wave P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£939	£991	£1042	£1049	£1104	£1117	£1217	£1281	-	£1312	-	-	-	-	-
WHITE POLYURETHANE	CENTRE PIVOT ROOF WINDOWS															
	FTU-V/C P2 P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£521	£566	£600	£600	£609	£617	£676	£785	£878	£805	£839	£866	£917	£848	£1016
	FTU-V/C P5 P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£749	£815	£844	£854	£874	£901	£986	£1138	-	£1158	£1211	£1248	£1336	£1221	-
	FTU-V/C P2 Z-Wave P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£813	£853	£909	£909	£953	£959	£1045	£1090	£1138	£1113	£1152	£1154	£1212	£1154	£1204
	FTU-V/C P5 Z-Wave P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£968	£1021	£1074	£1080	£1137	£1150	£1254	£1320	-	£1352	-	-	-	-	-
PVC	CENTRE PIVOT ROOF WINDOWS															
	PTP-V/C P2 P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£457	£491	£499	£512	£529	£529	£584	£672	£756	£678	£712	£750	£823	£756	£899

\* V-line - standard depth and ideal for tiles such as Double Roman.

J-line - 3cm deeper than standard depth - ideal for fitting window lower into the roof line.













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











\* ALL WINDOWS AVAILABLE IN NON VENTED ON REQUEST

## CONSERVATION STYLE WINDOWS



windows external dimensions [cm]		55x98	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x118	114x140	134x98
effective glazing area [m <sup>2</sup> ]		 0.29	 0.38	 0.47	 0.47	 0.59	 0.72	 0.82	 0.75	 0.92	 0.95	 1.16	 0.92
size symbol		02	03	04	05	06	07	13	08	09	10	11	12
NATURAL PINE	TOP HUNG ROOF WINDOWS												
	FPP-V/C P2 preSelect P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£632	£644	£678	£655	£709	£743	£886	£782	£843	£843	£923	£861
WHITE ACRYLIC	TOP HUNG ROOF WINDOWS												
	FPW-V/C P2 preSelect P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£632	£644	£678	£655	£709	£743	£886	£782	£843	£843	£923	£861
WHITE POLYURETHANE	TOP HUNG ROOF WINDOWS												
	FPU-V/C P2 preSelect P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£711	£717	£735	£735	£769	£823	£1026	£848	£914	£920	£1004	£938
PVC	TOP HUNG ROOF WINDOWS												
	PPP-V/C P2 preSelect P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£890	£900	£952	£952	£1018	£1106	£1213	£1183	£1263	£1263	£1423	-

NOTE- TRIPLE GLAZED (P5) AVAILABLE TO ORDER IN MAX VERSION  
- PLEASE CONTACT FAKRO SALES OFFICE FOR FURTHER DETAILS.

windows external dimensions [cm]		55x78	55x98	55x118	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x118	114x140	134x98	94x160
effective glazing area [m <sup>2</sup> ]		 0.21	 0.29	 0.37	 0.38	 0.47	 0.47	 0.59	 0.72	 0.82	 0.75	 0.92	 0.95	 1.16	 0.92	 0.75
size symbol		01	02	16	03	04	05	06	07	13	08	09	10	11	12	80
NATURAL PINE	HIGHLY ENERGY - EFFICIENT WINDOWS NON-VENTED															
	FTT/C U6 U6 - High energy-efficient triple glazed unit. U-value of window 0.80	-	£867	£902	£902	£958	£968	£1087	£1195	£1392	£1253	£1288	£1298	£1462	£1326	£1573
	FTT/C U8 Thermo U8 - Passive quadruple glazed unit. U-value of window 0.58*	-	£1465	£1548	£1553	£1656	£1664	£1840	£2032	£2380	£2128	£2181	£2193	£2481	£2264	£2697
WHITE POLYURETHANE	FTT/U/C U6 U6 - High energy-efficient triple glazed unit. U-value of window 0.80	-	£948	£1001	£1001	£1056	£1061	£1195	£1323	£1545	£1392	£1409	£1444	£1644	£1472	£1771
	FTT/U/C U8 Thermo U8 - Passive quadruple glazed unit. U-value of window 0.58*	-	£1744	£1840	£1840	£1936	£1936	£2181	£2425	£2796	£2523	£2589	£2589	£2917	£2660	£3164

\*WINDOW U-VALUE WHEN INSTALLED WITH THERMAL FLASHING  
CONSERVATION WINDOWS FTT U6 & U8 DO NOT INCLUDE THE FLASHING KIT - PLEASE SELECT A SUITABLE FLASHING KIT

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\* ALL WINDOWS AVAILABLE IN NON VENTED ON REQUEST






## VERTICAL COMBINATION WINDOWS IN CONSERVATION STYLE

windows external dimensions [cm]	78x160	78x180	78x206	94x160	94x180	94x206
effective glazing area [m <sup>2</sup> ]	0.85	0.92	1.19	1.07	1.22	1.46
size symbol	13	40	42	80	41	43

WINDOWS WITH RAISED AXIS OF ROTATION – HIGH PIVOT proSky							
NATURAL PINE	FYP-V/C P2 proSky P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£857	£972	£930	£1013	£1060	£1154
WHITE ACRYLIC	FYW-V/C P2 proSky P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£877	£999	£962	£1047	£1096	£1193
WHITE POL.	FYU-V/C P2 proSky P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£913	£1047	£986	£1084	£1133	£1242

windows external dimensions [cm]	78x206	78x235*	78x255	94x206	94x235	94x255
top sash dimensions [cm]	78x160	78x160	78x160	94x160	94x160	94x160
bottom sash dimensions [cm]	78x50	78x78	78x98	94x50	94x78	94x98
size symbol	CB	CC	CD	DB	DC	DD

WINDOWS WITH RAISED AXIS OF ROTATION – HIGH PIVOT Duet proSky							
NATURAL PINE	FDY-V/C P2 Duet proSky	£1184	£1291	£1447	£1279	£1467	£1525
	P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3						
WHITE POL.	FDY-V/U/C P2 Duet proSky	£1325	£1447	£1622	£1435	£1644	£1710
	P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3						

windows external dimensions [cm]		78x60	78x75	78x95	78x115	78x137	94x75	94x95	94x115	94x137
effective glazing area [m <sup>2</sup> ]										
size symbol		33	81	82	83	84	85	86	87	88
NATURAL PINE	<b>BDL/C P2, BDR/C P2</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	<b>£760</b>	<b>£823</b>	<b>£918</b>	<b>£1 006</b>	<b>£818</b>	<b>£899</b>	<b>£974</b>	<b>N/A</b>	<b>£911</b>
	<b>BVP/C P2</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	<b>£572</b>	<b>£603</b>	<b>£636</b>	<b>£712</b>	<b>£785</b>	<b>£670</b>	<b>£706</b>	<b>£706</b>	<b>£731</b>
	<b>BXP/C P2</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	<b>£490</b>	<b>£511</b>	<b>£536</b>	<b>£597</b>	<b>£652</b>	<b>£560</b>	<b>£585</b>	<b>£652</b>	<b>£712</b>

NOTE- TRIPLE GLAZED (P5) AVAILABLE TO ORDER – PLEASE CONTACT FAKRO SALES OFFICE FOR FURTHER DETAILS

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\* ALL WINDOWS AVAILABLE IN NON VENTED ON REQUEST

## STANDARD FLASHINGS

- Correct choice and installation of the roof window flashing is essential. FAKRO not only supply flashings to allow roof windows to be installed with any type of roof covering but enables windows to be fitted at three key depths.
  - The basic colour of FAKRO flashings is grey/brown RAL 7022 but conservation flashings are black (RAL 9005), to match the cladding and mullion bars.
- You can install a FAKRO roof window at any of three depths:
- V** - This is the standard depth and ideal for tiles such as the Double Roman.
  - N** - 3cm higher than the standard depth, for high profile tiles such as the Bold Roll.
  - J** - 3cm deeper than the standard depth – ideal for fitting the window lower into the roof line.



### ESV-T

- For flat roof coverings such as bitumen shingles up to 10mm thickness.



### EZV-A, EZJ-A

- For profiled roof coverings up to 45mm depth.



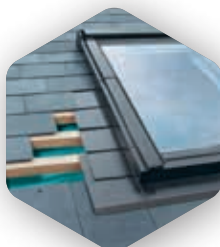
### EHN-A

- For deeply profiled roof coverings up to 90mm depth.



### EHV-AT Thermo

- Provides thermal insulation above the surface of the battens.



### ELV, ELJ, ELV-T

- For natural and man-made, non-interlocking slates up to 10mm thickness.



### EE\_

- For flat roofing materials and metal roofs.



### EPV, EPV-T

- For non-interlocking plain tiles up to 16mm thick (clay peg tiles etc).



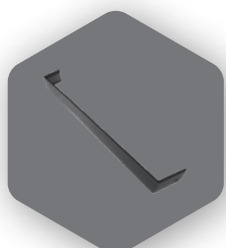
### EZA, ESA, EHA

- A unique solution for low pitch roofs. Contact FAKRO sales office for further details.



### EBV

- Enables tight connection of a roof window with the roofing material such as steel panel sheet – with prefabricated (system) joints.



### Kingspan Header + EKB Profile Set

- Header section for membrane roofs. Price on application.



### EUN/B, EUV/B, EUV-L/B

- L-SHAPED Combinations only.
- EUN/B & EUV/B universal flashing for various types of roofing materials.
- EUV-L/B for slate roofing coverings up to 10mm thickness.

**NOTE – MULLION BARS IN RAL 7022 AVAILABLE ON REQUEST.**

## FLASHINGS FOR CENTRE PIVOT WINDOW, TOP HUNG AND PIVOT WINDOWS

windows external dimensions [cm] size symbol	55x78 01	55x98 02	55x118 16	66x98 03	66x118 04	78x98 05	78x118 06	78x140 07	78x160 13	94x118 08	94x140 09	114x118 10	114x140 11	134x98 12	94x160 80
<b>EZV-A</b> for interlocking tiles up to 45mm profile	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>EZJ-A</b> Recessed Style for interlocking tiles up to 45mm profile	£104	£108	£115	£124	£123	£123	£128	£134	£161	£131	£150	£149	£159	£160	£163
<b>ELV</b> for non-interlocking slate up to 10mm thick	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>ELJ</b> Recessed Style for non-interlocking slate up to 10mm thick	£104	£108	£115	£124	£123	£123	£128	£134	£161	£131	£150	£149	£159	£160	£163
<b>EPV</b> for plain tiles up to 16mm thick	£78	£82	£93	£93	£96	£96	£98	£98	£127	£100	£105	£114	£116	£119	£121
<b>EPJ</b> Recessed Style for plain tiles up to 16mm thick	£104	£108	£115	£124	£123	£123	£128	£134	£161	£131	£150	£149	£159	£160	£163
<b>EHN-A</b> for interlocking tiles up to 90mm profile	£84	£91	£96	£96	£100	£100	£105	£105	£120	£107	£110	£116	£119	£121	£123
<b>ELV-T Thermo universal</b> for non-interlocking slate up to 10mm thick	£136	£152	£160	£160	£163	£163	£171	£182	£207	£188	£198	£198	£207	£198	£234
<b>EPV-T Thermo</b> for plain tiles up to 16mm thick	£121	£134	£142	£142	£144	£144	£152	£157	£178	£165	£170	£173	£178	£174	£206
<b>EHN-AT Thermo</b> for interlocking tiles up to 90mm profile	£121	£134	£142	£142	£144	£144	£152	£157	£178	£165	£170	£173	£178	£174	£206
<b>EHV-AT Thermo</b> for interlocking tiles up to 90mm profile	£121	£134	£142	£142	£144	£144	£152	£157	£178	£165	£170	£173	£178	£174	£206
<b>EZA ESA &amp; EHA</b> Lifts windows out of the roofline by 10 degrees	£324	£334	£352	£352	£369	£366	£383	£399	£474	£409	£435	£435	£474	£435	£494
<b>EKB &amp; Kingspan Kit</b> A set of profiles covering the sides of the frame	£77	£87	£94	£87	£94	£87	£94	£102	£108	£94	£102	£102	£108	£94	£108
<b>EBV</b> Flashing for Steel Panel Sheet	£116	£121	£123	£126	£141	£141	£143	£146	£169	£148	£151	£156	£169	£161	£171

## STANDARD FLASHING KITS FOR proSky WINDOWS

windows external dimensions [cm] size symbol	78x160 13	78x180 40	78x206 42	94x160 80	94x180 41	94x206 43
<b>EZV-A</b> for interlocking tiles up to 45mm profile	£127	£129	£160	£120	£155	£168
<b>ELV</b> for non-interlocking slate up to 10mm thick	£127	£129	£160	£120	£155	£168
<b>EPV</b> for plain tiles up to 16mm thick	£127	£129	£160	£120	£155	£168
<b>EHN-A</b> for interlocking tiles up to 90mm profile	£120	£142	£151	£125	£167	£195

## STANDARD FLASHING KITS FOR Duet proSky WINDOWS

windows external dimensions [cm] size symbol	78x206 CB	78x235 CC	78x255 CD	94x206 DB	94x235 DC	94x255 DD
<b>EZV-A</b> for interlocking tiles up to 45mm profile	£159	£174	£178	£178	£196	£212
<b>ELV</b> for non-interlocking slate up to 10mm thick	£159	£174	£178	£178	£196	£212
<b>EPV</b> for plain tiles up to 16mm thick	£159	£174	£178	£178	£196	£212
<b>EHN-A</b> for interlocking tiles up to 90mm profile	£172	£186	£189	£195	£215	£235

## FLASHING FOR L-SHAPED COMBINATION WINDOWS

windows external dimensions [cm] size symbol	78x98 05	78x118 06	78x140 07	94x118 08	94x140 09	114x118 10	114x140 11	134x98 12
<b>EUV-L/B</b> for slate	£219	£231	£248	£243	£246	£246	£256	£254
<b>EUV/B</b> for tiles	£228	£241	£252	£247	£252	£252	£264	£256



## ► CONSERVATION STYLE FLASHING KITS

Whether for a listed building or a traditional barn conversion, FAKRO conservation style roof windows offer the facility to install them low within the roof line. Three depth options are available to suit all coverings.

For conservation roof windows 'J' flashings are most commonly used to provide the required low profile. Flashings available are as follows:

- EEJ/9005 - sheet metal roof coverings e.g. zinc, copper, stainless steel.
- ELJ/9005 - natural and man-made slates, etc. up to 10mm thick.
- EPJ/9005 - plain tiles (clay, non-interlocking tiles).
- ESJ/9005 - shingles e.g. cedar, asphalt, felts etc.
- EZJ/9005 - profiled roof coverings up to 45mm in depth e.g. Double Pantile.

### FLASHINGS FOR CENTRE PIVOT WINDOW, TOP HUNG AND PIVOT WINDOWS

windows external dimensions [cm] size symbol	55x78 01	55x98 02	55x118 16	66x98 03	66x118 04	78x98 05	78x118 06	78x140 07	78x160 13	94x118 08	94x140 09	114x118 10	114x140 11	134x98 12	94x160 80
<b>EZV-A/9005</b> for interlocking tiles up to 45mm profile	£97	£105	£115	£115	£117	£117	£120	£120	£146	£125	£133	£140	£146	£143	£153
<b>EZJ-A/9005</b> Recessed Style for interlocking tiles up to 45mm profile	£138	£149	£157	£157	£165	£165	£168	£168	£204	£182	£190	£198	£204	£212	£220
<b>ELV/9005</b> for non-interlocking slate up to 10mm thick	£97	£105	£115	£115	£117	£117	£120	£120	£146	£125	£133	£140	£146	£143	£153
<b>ELJ/9005</b> Recessed Style for non-interlocking slate up to 10mm thick	£138	£149	£157	£157	£165	£165	£168	£168	£204	£182	£190	£198	£204	£212	£220
<b>EPV/9005</b> for plain tiles up to 16mm thick	£97	£105	£115	£115	£117	£117	£120	£120	£146	£125	£133	£140	£146	£143	£153
<b>EPJ/9005</b> Recessed Style for plain tiles up to 16mm thick	£138	£149	£157	£157	£165	£165	£168	£168	£204	£182	£190	£198	£204	£212	£220
<b>EHN-A/9005</b> Recessed Style for interlocking tiles up to 90mm profile	£118	£124	£128	£128	£135	£131	£141	£141	£167	£144	£149	£156	£167	£162	£169

### FLASHINGS FOR proSky WINDOWS

windows external dimensions [cm] size symbol	78x160 13	78x180 40	78x206 CB	78x235 CC	78x255 CD	94x160 80	94x180 41	94x206 DB	94x235 DC	94x255 DD
<b>EZV-A/9005</b> for interlocking tiles up to 45mm profile	£119	£150	£163			£125	£180	£187		
<b>ELV/9005</b> for non-interlocking slate up to 10mm thick	£119	£150	£163			£125	£180	£187		
<b>EPV/9005</b> Recessed Style for plain tiles up to 16mm thick	£119	£150	£163			£125	£180	£187		
<b>EHN-A/9005</b> Recessed Style for interlocking tiles up to 90mm profile	£137	£141	£181			£139	£140	£205		

### FLASHING FOR L-SHAPED COMBINATION WINDOWS

windows external dimensions [cm] size symbol	78x98 05	78x118 06	78x140 07	94x118 08	94x140 09	114x118 10	114x140 11	134x98 12
<b>EUV-L/B/9005</b> for slate	£228	£241	£251	£246	£251	£251	£264	£257
<b>EUV/B/9005</b> for tiles	£265	£286	£306	£302	£308	£308	£323	£318





## FLASHING FOR JOINING WINDOWS IN COMBINATIONS

- The combination flashing are ready made flashing systems for joining windows in groups: horizontally, vertically and in a block.
- The distance between windows joined horizontally and vertically is normally 10cm.
- If external shutters are installed on windows installed vertically, a gap of at least 20cm is required.
- FAKRO combination system enables to install all types of windows, top hung and pivot windows as well as centre pivot.
- There are seven modules in the FAKRO combination system, to cater for any layout you may require. The "Module" is a single and properly marked element of the flashing and assigned to its specific place in combination.



**B2/1**

Horizontal combination



**B1/2**

Vertical combination



**B2/2**

Block combination

### A SELECTION OF THE MOST POPULAR COMBINATION FLASHING KITS ARE SHOWN BELOW - OTHERS AVAILABLE ON REQUEST.

windows external dimensions [cm] size symbol	55x78 01	55x98 02	55x118 16	66x98 03	66x118 04	78x98 05	78x118 06	78x140 07	78x160 13	94x118 08	94x140 09	114x118 10	114x140 11	134x98 12	94x160 80
<b>2 Piece Combinations B2/1, B1/2 EZV-A, ELV, EPV</b>	£195	£205	£233	£233	£240	£240	£245	£245	£316	£250	£262	£285	£290	£298	£303
<b>2 Piece Combinations B2/1, B1/2 EZV-A/9005, ELV/9005, EPV/9005</b>	£243	£262	£287	£287	£294	£294	£300	£300	£364	£313	£332	£351	£364	£357	£383
<b>3 Piece Combinations B3/1, B1/3 EZV-A, ELV, EPV</b>	£293	£308	£349	£349	£360	£360	£368	£368	£474	£375	£392	£428	£435	£446	£454
<b>3 Piece Combinations B3/1, B1/3 EZV-A/9005, ELV/9005, EPV/9005</b>	£364	£392	£431	£431	£440	£440	£450	£450	£546	£469	£498	£527	£546	£536	£574
<b>4 Piece Combinations B2/2 EZV-A, ELV, EPV</b>	£390	£410	£465	£465	£480	£480	£490	£490	£633	£500	£523	£570	£580	£595	£605
<b>4 Piece Combinations B2/2 EZV-A/9005, ELV/9005, EPV/9005</b>	£485	£523	£574	£574	£587	£587	£600	£600	£728	£625	£664	£702	£728	£715	£766
<b>6 Piece Combinations B3/2, B2/3 EZV-A, ELV, EPV</b>	£585	£615	£698	£698	£720	£720	£735	£735	£949	£750	£785	£855	£870	£893	£908
<b>6 Piece Combinations B3/2, B2/3 EZV-A/9005, ELV/9005, EPV/9005</b>	£728	£785	£862	£862	£881	£881	£900	£900	£1091	£938	£996	£1053	£1091	£1072	£1149

### A SELECTION OF THE MOST POPULAR COMBINATION FLASHING KITS ARE SHOWN BELOW - OTHERS AVAILABLE ON REQUEST.

windows external dimensions [cm] size symbol	55x78 01	55x98 02	55x118 16	66x98 03	66x118 04	78x98 05	78x118 06	78x140 07	78x160 13	94x118 08	94x140 09	114x118 10	114x140 11	134x98 12	94x160 80
<b>2 Piece Combinations B2/1, B1/2 EHN-A</b>	£210	£228	£240	£239	£250	£250	£263	£263	£299	£268	£275	£290	£298	£303	£308
<b>2 Piece Combinations B2/1, B1/2 EHN-A/9005</b>	£295	£311	£321	£321	£337	£327	£353	£353	£417	£359	£372	£391	£417	£404	£423
<b>3 Piece Combinations B3/1, B1/3 EHN-A</b>	£315	£341	£360	£358	£375	£375	£394	£394	£449	£401	£413	£435	£446	£454	£461
<b>3 Piece Combinations B3/1, B1/3 EHN-A/9005</b>	£442	£467	£481	£481	£505	£491	£529	£529	£625	£539	£558	£587	£625	£606	£635
<b>4 Piece Combinations B2/2 EHN-A</b>	£420	£455	£480	£478	£500	£500	£525	£525	£599	£535	£550	£580	£595	£605	£615
<b>4 Piece Combinations B2/2 EHN-A/9005</b>	£590	£622	£641	£641	£673	£654	£705	£705	£834	£718	£744	£782	£834	£808	£846
<b>6 Piece Combinations B3/2, B2/3 EHN-A</b>	£630	£683	£720	£716	£750	£750	£788	£788	£898	£803	£825	£870	£893	£908	£923
<b>6 Piece Combinations B3/2, B2/3 EHN-A/9005</b>	£885	£933	£962	£962	£1010	£981	£1058	£1058	£1250	£1077	£1116	£1174	£1250	£1212	£1270

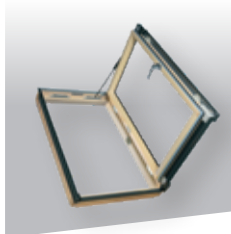
NOTE: THE DISTANCE BETWEEN WINDOWS JOINED HORIZONTALLY AND VERTICALLY IS NORMALLY 10CM. IF EXTERNAL SHUTTERS ARE INSTALLED ON WINDOWS INSTALLED VERTICALLY, A GAP OF AT LEAST 20CM IS REQUIRED. OTHER SIZED GAPS CAN BE MANUFACTURED FOR FURTHER INFORMATION PLEASE CONTACT CUSTOMER SERVICES OR EMAIL. THE STANDARD DISTANCE BETWEEN WINDOWS POSITIONED SIDE BY SIDE IS 10CM - THE OPTION OF 18MM/40MM AND 50MM GUTTER CHANNELS ARE AVAILABLE IN CERTAIN CIRCUMSTANCES - PLEASE CONTACT THE FAKRO SALES OFFICE FOR FURTHER DETAILS



## ▶ SIDE HUNG ESCAPE WINDOW

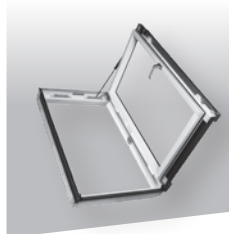
IN NATURAL PINE AND WHITE POLYURETHANE FINISH

- The universal escape windows is side hung and therefore side-opening. Once unlocked, the sash can be opened to 90°.
- Gas piston fitted in the top part of the window makes opening easier, holds the sash stable when opened and prevents against accidental closure.
- The universal design of side hung escape windows. Before proceeding to installation it is possible to change the opening side. Windows are delivered with factory pre-fixed right opening side. It is possible to order the FWP model – left.
- Suitable for pitches from 15° - 55°.
- Available in conservation style.



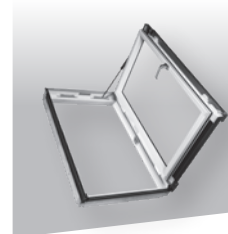
**FWP**

- The same flashings as for roof windows are used in the installation process. This enables side hung escape windows to be fitted in one combination with roof windows.
- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with natural acrylic lacquer.



**FWW**

- The same flashings as for roof windows are used in the installation process. This enables side hung escape windows to be fitted in one combination with roof windows.
- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with white acrylic paint.



**FWU**

- The same flashings as for roof windows are used in the installation process. This enables side hung escape windows to be fitted in one combination with roof windows.
- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with white polyurethane varnish.

### SIDE HUNG ESCAPE WINDOW

NATURAL PINE	windows external dimensions [cm]	55x98*	66x78	66x98	66x118	78x98	78x118
	effective glazing area [m <sup>2</sup> ]	0.29	0.28	0.38	0.47	0.47	0.59
	size symbol	02	22	03	04	05	06
	<b>FWP P2</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.4	<b>£504</b>	<b>£504</b>	<b>£504</b>	<b>£526</b>	<b>£646</b>	<b>£710</b>
WHITE POL.	<b>FWP P5</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	<b>£775</b>	<b>£769</b>	<b>£812</b>	<b>£873</b>	<b>£867</b>	<b>£947</b>
	<b>FWU P2</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.4	<b>£605</b>	<b>£588</b>	<b>£639</b>	<b>£686</b>	<b>£676</b>	<b>£744</b>
WHITE POL.	<b>FWU P5</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	<b>£836</b>	<b>£826</b>	<b>£871</b>	<b>£937</b>	<b>£922</b>	<b>£1033</b>

### SIDE HUNG ESCAPE WINDOW- CONSERVATION STYLE

	windows external dimensions [cm]	55x98*	66x78	66x98	66x118	78x98	78x118
	effective glazing area [m <sup>2</sup> ]	0.29	0.28	0.38	0.47	0.47	0.59
	size symbol	02	22	03	04	05	06
	<b>FWP/C P2</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.4	<b>£762</b>	<b>£745</b>	<b>£781</b>	<b>£818</b>	<b>£824</b>	<b>£879</b>
	<b>FWP/C P5</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	<b>£1006</b>	<b>£996</b>	<b>£1040</b>	<b>£1102</b>	<b>£1111</b>	<b>£1192</b>
	<b>FWU/C P2</b> P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.4	<b>£832</b>	<b>£827</b>	<b>£863</b>	<b>£912</b>	<b>£919</b>	<b>£987</b>
	<b>FWU/C P5</b> P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	<b>£1068</b>	<b>£1058</b>	<b>£1121</b>	<b>£1186</b>	<b>£1192</b>	<b>£1274</b>

SIDE HUNG ESCAPE WINDOW FWW AVAILABLE ON REQUEST

NOTE- IN THIS SIZE, THE WINDOW DOES NOT MEET THE ESCAPE REQUIREMENTS

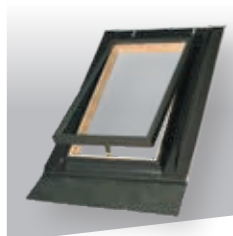
### FLASHINGS FOR SIDE HUNG ESCAPE WINDOW

windows external dimensions [cm]	55x98	66x78	66x98	66x118	78x98	78x118
size symbol	02	22	03	04	05	06
<b>EZV-A</b> for interlocking tiles up to 45mm profile	<b>£82</b>	<b>£112</b>	<b>£93</b>	<b>£96</b>	<b>£96</b>	<b>£98</b>
<b>ELV</b> for non-interlocking slate up to 10mm thick	<b>£82</b>	<b>£112</b>	<b>£93</b>	<b>£96</b>	<b>£96</b>	<b>£98</b>
<b>EPV</b> for plain tiles up to 16mm thick	<b>£82</b>	<b>£112</b>	<b>£93</b>	<b>£96</b>	<b>£96</b>	<b>£98</b>
<b>EHN-A</b> for interlocking tiles up to 90mm profile	<b>£91</b>	<b>£115</b>	<b>£96</b>	<b>£100</b>	<b>£100</b>	<b>£105</b>



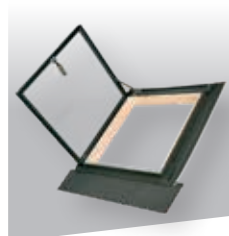
## ➤ ACCESS ROOF LIGHTS

- Designed solely for uninhabited lofts with the interior temperature similar to the outdoor temperature.
- It enables easy access to the roof as well as provides illumination of the interior with natural daylight.
- Integrated with universal flashing.
- U-value 1.7



### WG\_



- The WG\_ access roof light has a top hung design and the sash opens outwards.
- Specially rounded locking bolts eliminate the risk of injuries.
- Available in two versions:
  - WGT with single toughened glass 4H.
  - WGI with glazing unit 4H-9-4H.
- Conservation style available.
- Universal flashing.
- Suitable for pitches of 15°-60°.






### WLI

- WLI is a side hung window. It can be installed in left or right opening version.
- It comes complete with a turn limiter to hold the sash stable and prevent accidental closure.
- The lower part of the access roof light comes with a specially shaped profile which covers the frame and prevents slipping while getting onto the roof.
- Conservation style available.
- Universal flashing.
- Suitable for pitches of 15°-70°.

#### ACCESS ROOF LIGHTS

dimensions [cm]		46x55	46x75
NATURAL PINE			
	WGT	£124	£134
	WGI	£147	£157
	WGI/C	£193	£207

#### ACCESS ROOF LIGHTS

dimensions [cm]		54x83	54x98	86x87
NATURAL PINE				
	WLI	£228	£249	£262
	WLI/C	£292	£292	£348



## SMOKE VENTILATION SYSTEMS FOR PITCHED ROOFS

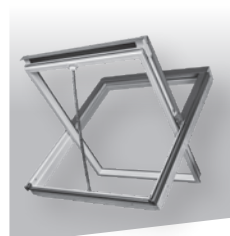
Smoke along with fire pose a serious threat to human life and health. Contrary to popular belief, 90% of fire-related deaths are a result of smoke inhalation, and not high temperatures or burning. Smoke also causes considerable damage to property. Applying appropriate smoke and heat escape systems can provide a significant help in preventing dangers caused by high concentrations of smoke and heat. Together with smoke sensors and smoke vent alarm buttons, the FSR window forms the so called gravitational system for smoke and heat extraction. The system is applied in public utility buildings (especially in stairwells, multi-family buildings, hotels, etc.).



### FSR P2

CENTRE PIVOT SMOKE VENT WINDOW

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with with natural lacquer.



### FSR/U P2

CENTRE PIVOT SMOKE VENT WINDOW

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with white polyurethane - white acrylic available to order.

## SMOKE VENTILATION SYSTEMS FOR PITCHED ROOFS

NATURAL PINE	FSR P2 10 (114 x 118cm)	Single centre pivot window with electrics pack and flashing kit giving 1.0m <sup>2</sup> of ventilation. 1no FSR P2 10 114 x 118cm + fitted chain actuator 1no Flashing Kit 1no RZN 4503-T Control Unit 1no 12v 3.2amp battery back up pack 1no R145 break glass alarm 1no SD-O-371 smoke detector	£2049
	FSR-2 P2 2 x 07 (78 x 140cm)	2no centre pivot windows with electrics pack and flashing kit giving 1.5m <sup>2</sup> of ventilation. 2no FSR P2 07 78 x 140cm + fitted chain actuator 1no B2/1 Combination Flashing Kit (100mm gutter) 1no RZN 4503-T Control Unit 1no 12v 3.2amp battery back up pack 1no R145 break glass alarm 1no SD-O-371 smoke detector	£3333
	FSR P2 17 (134 x 140cm)	Single centre pivot window with electrics pack and flashing kit giving 1.5m <sup>2</sup> of ventilation. 1no FSR P2 17 134 x 140cm + fitted chain actuator 1no Flashing Kit 1no RZN 4503-T Control Unit 1no 12v 3.2amp battery back up pack 1no R145 break glass alarm 1no SD-O-371 smoke detector	£2171
WHITE POLYURETHANE	FSR/U P2 10 (114 x 118cm)	Single centre pivot window with electrics pack and flashing kit giving 1.0m <sup>2</sup> of ventilation. 1no FSR/U P2 10 114 x 118cm + fitted chain actuator 1no Flashing Kit 1no RZN 4503-T Control Unit 1no 12v 3.2amp battery back up pack 1no R145 break glass alarm 1no SD-O-371 smoke detector	£2049
	FSR/U-2 P2 2 x 07 (78 x 140cm)	2no centre pivot windows with electrics pack and flashing kit giving 1.5m <sup>2</sup> of ventilation. 2no FSR/U P2 07 78 x 140cm + fitted chain actuator 1no B2/1 Combination Flashing Kit (100mm gutter) 1no RZN 4503-T Control Unit 1no 12v 3.2amp battery back up pack 1no R145 break glass alarm 1no SD-O-371 smoke detector	£3333
	FSR/U P2 17 (134 x 140cm)	Single centre pivot window with electrics pack and flashing kit giving 1.5m <sup>2</sup> of ventilation. 1no FSR/U P2 17 134 x 140cm + fitted chain actuator 1no Flashing Kit 1no RZN 4503-T Control Unit 1no 12v 3.2amp battery back up pack 1no R145 break glass alarm 1no SD-O-371 smoke detector	£2171

ADDITIONAL SMOKE SENSORS AND BREAKGLASS CAN BE ORDERED IF REQUIRED – CONTACT FAKRO SALES OFFICE FOR FURTHER DETAILS.  
ALL KITS ARE SUPPLIED FOR ON SITE INSTALLATION & COMMISSIONING BY OTHERS.  
ROOF WINDOWS SUPPLIED BY FAKRO ARE FULLY TESTED AND CERTIFIED TO EN 12101-2:2003

PLEASE ADVISE FLASHING KIT TYPE REQUIRED AT THE TIME OF ORDER.

## FSR P2 SMOKE VENTILATION CENTRE PIVOT ROOF WINDOWS (EN 12101-2:2003)



### FSR P2



### FSR ELECTRICS

VRS10FAK	£220
DEFAK021	£130
DEFAK022	£176
LT84-U	£121

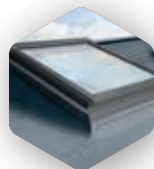
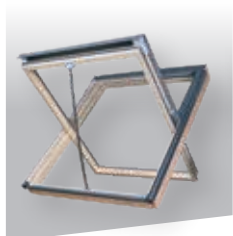
FSR WINDOWS COME WITH THE ACTUATOR FACTORY FITTED - ALL OTHER ELEMENTS ARE SUPPLIED LOOSE FOR ON SITE INSTALLATION BY OTHERS.

NOTE - AVAILABLE IN CONSERVATION ON REQUEST.





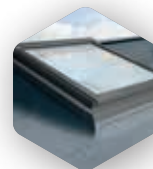
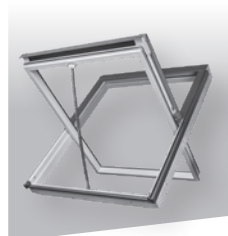
## SMOKE VENTILATION SYSTEMS FOR FLAT ROOFS



**FSR P2+ EFW\***

### CENTRE PIVOT SMOKE VENT WINDOW

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with with natural lacquer.
- Flat roof system makes it possible to install windows on flat or very low-pitched roofs.



**FSR/U P2+ EFW\***

### CENTRE PIVOT SMOKE VENT WINDOW

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with white polyurethane - white acrylic available to order.
- Flat roof system makes it possible to install windows on flat or very low-pitched roofs.

## SMOKE VENTILATION SYSTEMS FOR PITCHED ROOFS

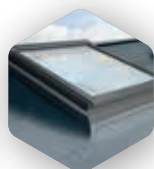
NATURAL PINE	FSR P2 +EFW 10 (114 x 118cm)	Single centre pivot window with electrics pack and flashing kit giving 1.0m <sup>2</sup> of ventilation. 1no FSR P2 10 114 x 118cm + fitted chain actuator 1no Flashing Kit* 1no RZN 4503-T Control Unit 1no 12v 3.2amp battery back up pack 1no RT45 break glass alarm 1no SD-O-371 smoke detector	<b>£2657</b>	WHITE POLYURETHANE	FSR/U P2 +EFW 10 (114 x 118cm)	Single centre pivot window with electrics pack and flashing kit giving 1.0m <sup>2</sup> of ventilation. 1no FSR/U P2 10 114 x 118cm + fitted chain actuator 1no Flashing Kit* 1no RZN 4503-T Control Unit 1no 12v 3.2amp battery back up pack 1no RT45 break glass alarm 1no SD-O-371 smoke detector	<b>£2657</b>
	FSR P2 +EFW 17 (134 x 140cm)	Single centre pivot window with electrics pack and flashing kit giving 1.5m <sup>2</sup> of ventilation. 1no FSR P2 17 134 x 140cm + fitted chain actuator 1no Flashing Kit* 1no RZN 4503-T Control Unit 1no 12v 3.2amp battery back up pack 1no RT45 break glass alarm 1no SD-O-371 smoke detector	<b>£2856</b>		FSR/U P2 +EFW 17 (134 x 140cm)	Single centre pivot window with electrics pack and flashing kit giving 1.5m <sup>2</sup> of ventilation. 1no FSR/U P2 17 134 x 140cm + fitted chain actuator 1no Flashing Kit* 1no RZN 4503-T Control Unit 1no 12v 3.2amp battery back up pack 1no RT45 break glass alarm 1no SD-O-371 smoke detector	<b>£2856</b>

ADDITIONAL SMOKE SENSORS AND BREAKGLASS CAN BE ORDERED IF REQUIRED – CONTACT FAKRO SALES OFFICE FOR FURTHER DETAILS.  
ALL KITS ARE SUPPLIED FOR ON SITE INSTALLATION & COMMISSIONING BY OTHERS.  
ROOF WINDOWS SUPPLIED BY FAKRO ARE FULLY TESTED AND CERTIFIED TO EN 12101-2:2003

\*PLEASE ADVISE FLASHING KIT TYPE REQUIRED AT THE TIME OF ORDER. THIS KIT CAN INCLUDE EFW, ESA, EZA OR EHA.

OTHER WINDOWS

## FSR P2 SMOKE VENTILATION CENTRE PIVOT ROOF WINDOWS (EN 12101-2:2003)



**FSR ELECTRICS**

**FSR P2+ EFW\***

VRS10FAK	£220
DEFAK021	£130
DEFAK022	£176
LT84-U	£121

FSR WINDOWS COME WITH THE ACTUATOR FACTORY FITTED - ALL OTHER ELEMENTS ARE SUPPLIED LOOSE FOR ON SITE INSTALLATION BY OTHERS.

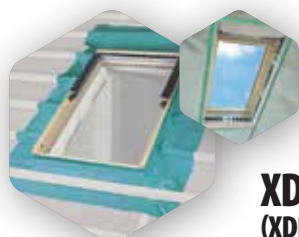
NOTE - AVAILABLE IN CONSERVATION ON REQUEST.

## INSTALLATION ACCESSORIES



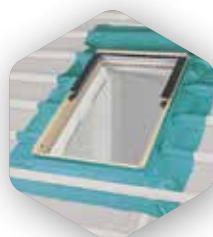
FAKRO installation accessories provide an enhanced connection between the roof window and the roof construction. Using the under felt collar with thermo-insulation and air-tight flashing ensures the complete protection of a fitted roof window. Accessories manufactured by FAKRO will prolong the life of the window. The installation accessories reduce the risk of thermal bridging and guarantee the proper draining of any moisture around the FAKRO window. The fast finishing around the window from inside can be made thanks to the FAKRO original linings.

The shaping and forming of the window reveals (horizontal at the top and vertical at the bottom) is an important design consideration as it allows the maximum amount of natural daylight into the room and an efficient circulation of air around the window.



**XDK**  
(XDP+XDS)

- The insulating set is designed to enable fast thermal, air-permeable and air tight insulation around the roof window.



**XDP**

- XDP insulating set is designed to enable fast and tight air-permeable and thermal insulation around the window to be installed. The set consists of air-permeable membrane and thermo-insulating material made of natural wool.



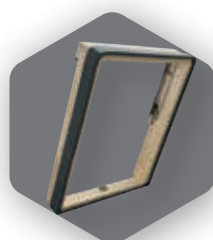
**XDS**

- Air-tight flashing should be secured internally to form a barrier against warm and humid air as any moisture on the surface of the insulation greatly reduces its thermal insulation properties.



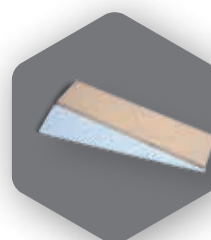
**XLC**  
Lining

- The internal lining is designed to ensure a secure finish around the window from the inside of the room.



**XWT**

- The XWT insulation is a polyethylene tape with a self-adhesive backing.
- XWT insulation makes an effective insulation of FAKRO windows easy and reduces the possibility of thermal bridging.



**XS\_**

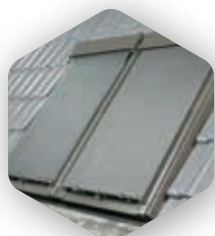
- Installed from the inside of the room.
- Made of a high quality pine in natural colour XSP on white XSW.

### INSTALLATION ACCESSORIES

windows external dimensions [cm] size symbol	55x78 01	55x98 02	55x118 16	66x98 03	66x118 04	78x98 05	78x118 06	78x140 07	78x160 13	94x118 08	94x140 09	114x118 10	114x140 11	134x98 12	94x160 80
<b>XDK</b>	£58	£58	£58	£58	£58	£58	£58	£64	£69	£64	£64	£64	£64	£64	£69
<b>XDP</b>	£36	£37	£39	£39	£40	£40	£42	£44	£45	£44	£45	£46	£48	£46	£48
<b>XDS</b>	£37	£37	£37	£37	£37	£37	£37	£40	£43	£40	£40	£40	£40	£40	£43
<b>XLC-F 40 &amp; XLC-P 40</b>	£343	£370	£376	£376	£400	£400	£418	£441	£492	£441	£453	£453	£477	£477	£507
<b>XLC-F 30 &amp; XLC-P 30</b>	£265	£276	£281	£281	£297	£297	£313	£324	£367	£324	£340	£340	£357	£357	£384
<b>XWT</b>	£39	£39	£39	£39	£39	£39	£39	£45	£47	£45	£45	£45	£45	£45	£47
<b>XSP,XSW</b>	£25	£25	£25	£25	£25	£30	£30	£30	£30	£33	£33	£35	£35	£38	£33

## ▶ ROOF WINDOW EXTERNAL ACCESSORIES

FAKRO roof window accessories combine quality, choice of design and ease of fitting with lasting performance. A wide range of styles and colours ensure that you can select blinds to suit any interior décor. Venetian, pleated, blackout and ARP roller blinds are supplied in aluminium cassettes that fit within the window sash to provide an effective light screen. In addition, you can order a colour swatch or speak to a member of the Sales Office on 01283 554755 about our blinds.



**8times**  
more effective

**AMZ**  
Awning blind

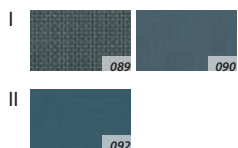
NEW LINE

- Eight times more efficient against the room overheating, effective shading of the interior while providing visibility.
- It is convenient and the awning blind can cover the window for the whole summer without the need to roll it up and down every day.
- Awning blinds are available in versions: AMZ standard, AMZ Z-Wave and AMZ Solar.



**ARZ**  
External roller shutter

- Effective protection against burdensome heat.
- Reducing heat loss in winter.
- Darkening the room.
- Makes break-in attempts more difficult.



### ROOF WINDOW EXTERNAL ACCESSORIES

windows external dimensions [cm] size symbol		55x78 01	55x98 02	55x118 16	66x98 03	66x118 04	78x98 05	78x118 06	78x140 07	78x160 13	94x118 08	94x140 09	114x118 10	114x140 11	134x98 12	94x160 80
AWNING BLINDS	AMZ I <b>NEW LINE</b>	£77	£77	£81	£81	£92	£94	£94	£97	£132	£104	£114	£117	£127	£124	£139
	AMZ II <b>NEW LINE</b>	£104	£104	£113	£113	£125	£128	£128	£140	£180	£150	£156	£168	£177	£171	£198
	AMZ Z-Wave I	£389	£389	£409	£409	£418	£424	£435	£446	£462	£451	£462	£473	£484	£473	£506
	AMZ Z-Wave II	£420	£420	£442	£442	£451	£457	£469	£482	£499	£486	£499	£510	£523	£510	£546
	AMZ Solar I	£550	£556	£565	£565	£578	£578	£583	£592	£603	£592	£603	£605	£616	£607	£623
	AMZ Solar II	£578	£583	£594	£594	£607	£607	£612	£622	£633	£622	£633	£636	£647	£638	£653
EXTERNAL ROLLER SHUTTER	ARZ-H	£331	£338	£347	£347	£360	£355	£371	£371	£398	£386	£401	£405	£420	£410	£427
	ARZ Z-Wave * (No Switch)	£371	£379	£388	£388	£405	£399	£420	£431	£449	£438	£452	£456	£471	£460	£477
	ARZ Solar *	£668	£680	£691	£691	£709	£709	£719	£735	-	£743	£754	£761	£780	£761	-

\* RETAINING 20 CM DISTANCE BETWEEN THE WINDOWS IN VERTICAL POSITION

ALL EXTERNAL ACCESSORIES ARE TO SPECIAL ORDER

NOTE - THE MATERIAL SAMPLE COLOURS PRINTED CAN DIFFER IN COLOUR TO THE ACTUAL PRODUCT DUE TO PHOTOGRAPHIC PROCESSES - SAMPLE SWATCHES ARE AVAILABLE UPON REQUEST TO THE SALES OFFICE



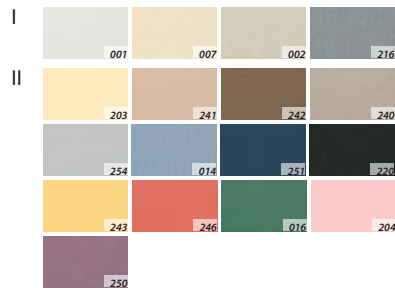
**Venetian  
blind  
AJP**

- Ability to control the amount of incoming light to the room.
- Control the direction of light entering by changing the angle of the slats.



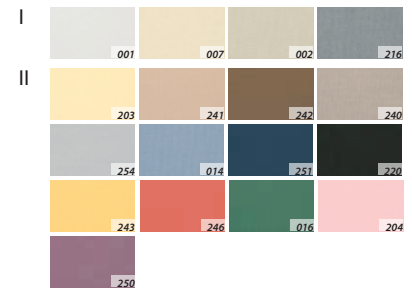
**Roller blind  
standard  
ARS**

- Protection from light.
- Can position the blind in three different positions.



**Dimming roller  
blinds  
ARP  
ARP Solar**

- Protection against sunlight during sunny days.
- Possibility to lock the blind in any position.







### Blackout blinds ARF

- Very good protection from sunlight.
- The possibility of darkening the room.
- Possibility to lock the blind in any position.
- Partial protection from solar heat.



NEW

### Blackout blinds ARF SOLAR

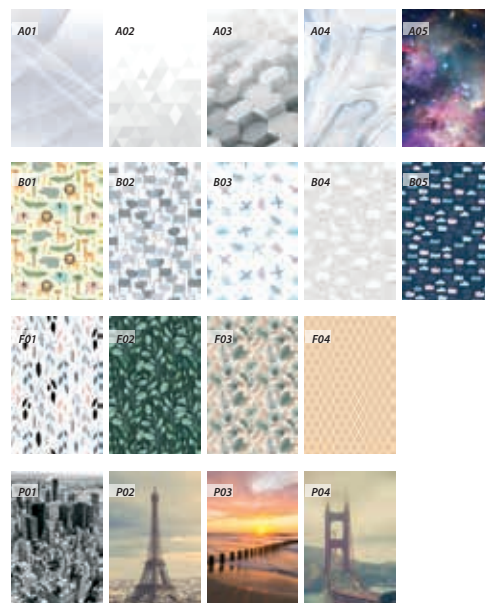
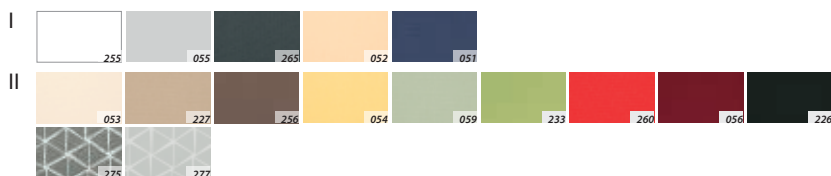
- Powered by electricity from the photovoltaic panel situated at the back of the blind on the glass side.
- Controlled in the Z-Wave system.
- Blackout fabric with a solar reflecting layer on the glass side.
- The colour range comprises 30 fabric colours.
- Available in two colour versions:
  - anodised with profiles in RAL 7044
  - white with profiles in RAL 9010



NEW

### Blackout blinds ARF Print

- The ARF Print blackout blind features the same design as the manually operated ARF model.
- The material used in the blind is the 255 fabric that does not let light through.
- Prints are made using safe HP-LATEX technology. The paints used are odourless and safe for health.



\*POPULAR STOCK LINES. ALL OTHERS SUBJECT TO ORDER.

NOTE - THE MATERIAL SAMPLE COLOURS PRINTED CAN DIFFER IN COLOUR TO THE ACTUAL PRODUCT DUE TO PHOTOGRAPHIC PROCESSES - SAMPLE SWATCHES ARE AVAILABLE UPON REQUEST TO THE SALES OFFICE.

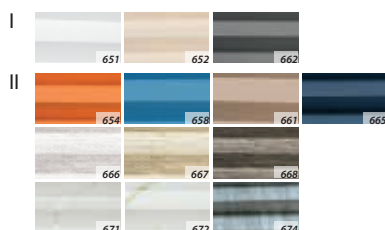


## ➤ ROOF WINDOW INTERNAL ACCESSORIES



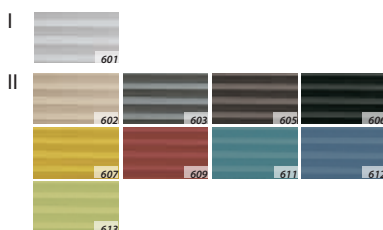
**Pleated  
blinds  
APS**

- Softness and diffusion of light.
- Possibility to lock the blind in any position.
- Top-down system - ease of operation by the use of the upper and lower bar.



**Pleated  
blinds  
APF**

- Softness and diffusion of light.
- Possibility to lock the blind in any position.
- Top-down system - ease of operation by the use of the upper and lower bar.



**Insect  
screen  
AMS**

- Protection against insects
- Minimum shading of the room
- Can be installed with other internal and external accessories



\*POPULAR STOCK LINES. ALL OTHERS SUBJECT TO ORDER.

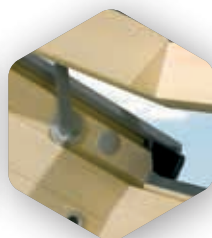
NOTE - THE MATERIAL SAMPLE COLOURS PRINTED CAN DIFFER IN COLOUR TO THE ACTUAL PRODUCT DUE TO PHOTOGRAPHIC PROCESSES - SAMPLE SWATCHES ARE AVAILABLE UPON REQUEST TO THE SALES OFFICE.

## ➤ ACCESSORIES FOR OPENING WINDOWS



**ZBH**

Handle with lock.



**ZBB**

Window restrictor.



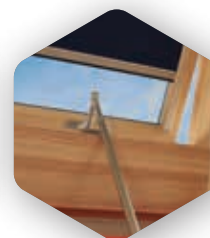
**ZBL**

Window lock.



**ZSZ**

Control rod for operating awning blinds, length 150cm.



**ZST**

Telescopic control rod enables the user to operate ARS, ARF, AJP, AMS. It also enables easy opening and closing of windows.

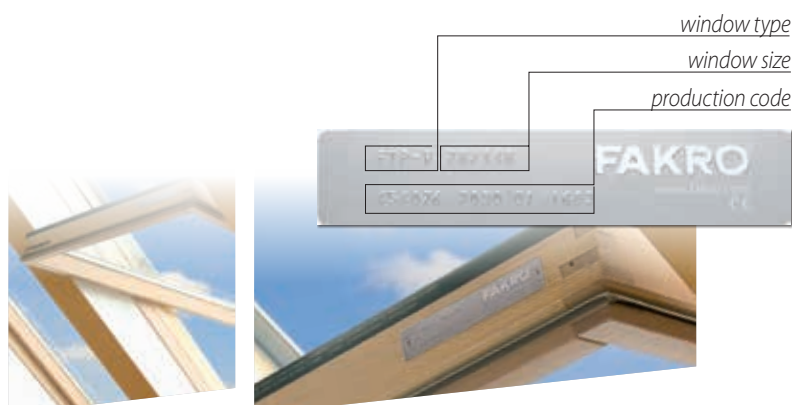
ZBH	ZBB	ZST	ZSP	ZSZ	ZBL	ZSD
£44	£46	£45	£34	£41	£44	£48

## ROOF WINDOW INTERNAL ACCESSORIES

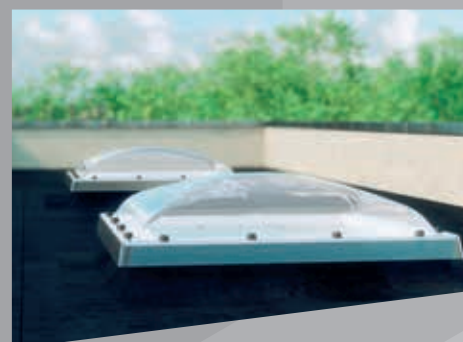
windows external dimensions [cm] size symbol		55x78 01	55x98 02	55x118 16	66x98 03	66x118 04	78x98 05	78x118 06	78x140 07	78x160 13	94x118 08	94x140 09	114x118 10	114x140 11	134x98 12	94x160 80
ROLLER BLIND STANDARD	AJP VENETIAN BLIND	£74	£76	£81	£81	£85	£83	£87	£94	£96	£95	£98	£103	£107	£98	£138
	ARS I	£47	£47	£50	£50	£51	£54	£55	£56	£58	£57	£58	£65	£67	£65	£67
	ARS II	£74	£75	£88	£89	£91	£93	£94	£95	£102	£99	£102	£106	£108	£104	£106
DIMMING ROLLER BLINDS	ARP I	£72	£72	£86	£86	£86	£89	£89	£89	-	£98	£98	£106	£111	£106	-
	ARP II	£101	£101	£121	£121	£121	£125	£125	£125	-	£138	£138	£149	£160	£149	-
	ARP Z-Wave I	£228	£231	£233	£233	£240	£240	£244	£249	-	£251	£253	£255	£262	£255	-
	ARP Z-Wave II	£242	£244	£248	£248	£251	£251	£255	£259	£285	£259	£268	£268	£273	£268	-
BLACKOUT BLINDS	ARF I	£78	£79	£95	£95	£95	£97	£101	£104	£114	£114	£114	£117	£132	£117	£132
	ARF II	£117	£117	£134	£134	£134	£138	£142	£148	£159	£159	£163	£167	£186	£167	£186
	ARF PRINT	£119	£119	£136	£136	£136	£140	£145	£151	£162	£162	£166	£171	£189	£171	£189
	ARF Z-Wave I	£231	£233	£237	£237	£242	£242	£246	£251	£255	£253	£255	£259	£266	£257	£268
	ARF Z-Wave II	£238	£240	£244	£244	£248	£248	£251	£255	£266	£255	£262	£266	£270	£266	£275
	ARF Solar I	£323	£326	£331	£331	£339	£339	£345	£351	£357	£354	£357	£362	£373	£360	£376
	ARF Solar II	£340	£343	£348	£348	£356	£356	£362	£369	£375	£372	£375	£380	£391	£378	£395
PLEATED BLINDS	APS I	£73	£77	£82	£82	£86	£84	£89	£95	£104	£99	£104	£111	£121	£116	£126
	APS II	£106	£112	£117	£117	£123	£120	£126	£135	£146	£140	£146	£155	£168	£160	£186
INSECT SCREEN	AMS 200	£115	£118	£120	£120	£120	£129	£129	£129	£129	£135	£135	£135	£135	£140	£135
	AMS 240	-	-	-	£122	£122	£131	£131	£131	£131	£139	£139	£155	£155	£157	-

\*non-standard sizes can be manufactured as a special order - please contact FAKRO GB for more information

NOTE - THE MATERIAL SAMPLE COLOURS PRINTED CAN DIFFER IN COLOUR TO THE ACTUAL PRODUCT DUE TO PHOTOGRAPHIC PROCESSES - SAMPLE SWATCHES ARE AVAILABLE UPON REQUEST TO THE SALES OFFICE.



NOTE - IN ORDER TO SELECT THE ACCESSORIES FOR FAKRO ROOF WINDOWS CORRECTLY, IT IS NECESSARY TO SPECIFY THE TYPE AND SIZE OF THE WINDOW. THIS INFORMATION CAN BE FOUND ON THE DATA PLATE LOCATED IN THE UPPER RIGHT CORNER OF THE SASH. TO READ THE DATA FOR ACCESSORIES MOUNTED ON THE SASH JUST ROTATE THE SASH IN POSITION FOR WASHING.



# FLAT ROOF WINDOW STRUCTURE

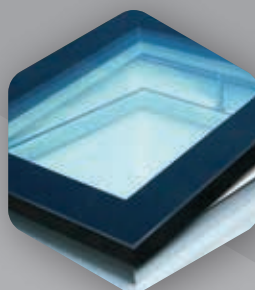
A flat roof window frame is constructed using reinforced multi-chamber PVC profiles. The internal surface of the frame is white (RAL 9010). The material used in the profile features high resistance against acids and has low moisture absorption. As a result, the window can be installed in every room.

Profiles are filled with insulation material, thus additionally improving the energy saving parameters of the product. The specially profiled covering material under the frame drip cap further improves the ultimate finish between the window and the roof covering.



The servo-motor in electrically opened windows is positioned in the sash and is protected against adverse weather conditions such as rain and snow.

This ensures trouble free operation of the servo-motor and all control elements.



The electrically operated windows (type C, type F, type G and type Z) have a built-in sensor that automatically activates the sash closing function when it rains.

Electric actuator situated in the window sash allows for sash maximum micro-opening up to 150mm.



# SAFETY & FUNCTIONALITY



## HIGH SAFETY

Flat roof windows DMF DU6 Secure, DXF DU6 Secure, DMC P4 Secure and DXC P4 Secure comply with European anti-burglary class RC2 (EN 1627). They are also characterised by the highest impact resistance (Class SB 1200 - EN 1873).

Installation of such windows in flat roofs increases operational safety and anti-burglary resistance of buildings.



## AMPLE NATURAL LIGHT

The basic function of the window is to provide an abundance of natural light in buildings with flat roofs. With specially designed shapes of the sash and frame profiles, flat roof windows feature up to 16% greater

glazing area when compared with other manufacturer's windows of a similar size. With such solution interiors under a flat roof are full of daylight.



## NON-STANDARD SIZES

In addition to standard sizes, type F windows can be manufactured in non-standard dimensions (in the range of 60x60cm - 120x220cm). Thermal insulation standards of buildings have been significantly increased and old skylights in flat roofs will not meet current requirements. The specification of a type F

window enables existing, often non-standard skylights to be replaced with ease. Taking advantage of such opportunity provides high flexibility when designing or renovating buildings.



## ACCESSORIES AND CONTROL

Installing the right internal and external accessories enhances functionality and aesthetic appearance of windows in the roof. Use of an external awning blind protects the room from overheating, while internal

accessories provide protection from intense sunlight and enhance interior design.


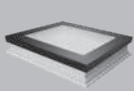
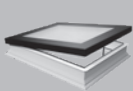
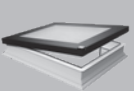
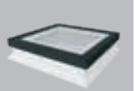
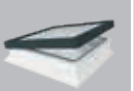
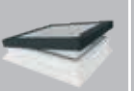



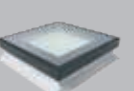
# HOW TO SELECT A FLAT ROOF WINDOW

**Flat roof windows** - The special structure of FAKRO flat roof windows provides excellent thermal insulation. The FAKRO product range includes flat roof windows with or without domes (type **F**, type **G**, type **Z** and type **C**) and walkable window **DXW**.

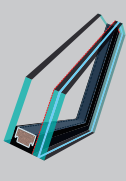
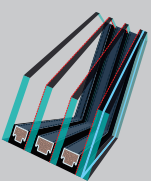
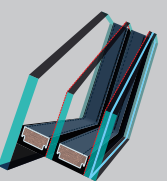
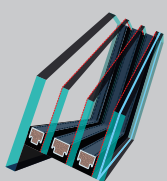
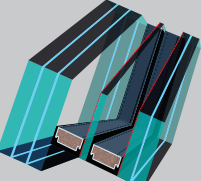
**Smoke and heat exhaust ventilation flat roof windows DSF, DSC** smoke ventilation flat roof windows are used for extraction of smoke and heat emitted in a building during a fire.

**Flat roof access windows:** Insulated **DRF, DRC** access roof lights are yet another one of FAKRO's innovative products. The range is expanding and creating solutions which provide safe and convenient access to the roof.

## STANDARD ROOF WINDOWS

FLAT ROOF WINDOWS									
									
DXF	DMF	DEF***	DXG	DMG	DEG***	DXZ AMZ/Z NEW	DMZ AMZ/Z NEW	DEZ AMZ/Z*** NEW	DXW
									
<ul style="list-style-type: none"> <li>• Type F flat roof window.</li> <li>• Suitable for pitches from 2-15°.</li> <li>• The frame constructed of multi-chamber PVC profiles filled with insulation material.</li> <li>• Can be mounted on an additional XRD base with a height of 15cm.</li> </ul>			<ul style="list-style-type: none"> <li>• Suitable for pitches from 2-15°**.</li> <li>• Covered with a special glass section which consists of toughened glass featuring a thickness of 4mm or 6mm. Window is factory equipped with glass section.</li> <li>• Specially prepared aluminium black profile.</li> <li>• The frame constructed of multi-chamber PVC profiles filled with insulation material.</li> <li>• Can be mounted on an additional XRD base with a height of 15cm.</li> </ul>			<ul style="list-style-type: none"> <li>• Suitable for pitches from 0-15°.</li> <li>• A new line of the D_Z windows offer the widest range of applications, complementing the FAKRO flat roof window range.</li> <li>• The new line comes in two versions:                             <ul style="list-style-type: none"> <li>- D_Z-A, high quality and very good parameters combined with modern aesthetics,</li> <li>- D_Z-B, high thermal insulation performance with the product.</li> </ul> </li> <li>• All D_Z windows are factory fitted AMZ/Z-Wave awning blind in 308 colour.</li> </ul>			<ul style="list-style-type: none"> <li>• Suitable for pitches from 0-15°.</li> <li>• Can be installed completely flush within the roofline.</li> <li>• Special design ensures safe walk across the window surface.</li> </ul>

## GLAZING UNIT


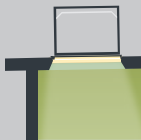

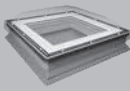
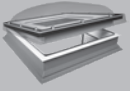
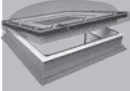
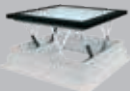



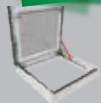

					
GLAZING UNIT	P2	U8(VSG)	DU6	DU8	DW6
GLAZING STRUCTURE	4-14-33.2	4-10-4-12-4-12-33.2	6-18-4-18-44.2 /6-16-4-18-55.2*	6-10-4-10-4-12-44.2	888.44-16-4-18-66.2
TECHNICAL SPECIFICATION	ANTIBURGLARY	PASSIVE GLAZING	HIGHLY ENERGY EFFICIENT	PASSIVE GLAZING	WALKABLE
GLAZING	DOUBLE	QUADRUPLE	TRIPLE	QUADRUPLE	TRIPLE
INNER LAMINATED GLASS	(CLASS P2A)	(CLASS P2A)	(CLASS P2A)	(CLASS P2A)	(CLASS P2A)

\* THE STRUCTURE OF THE GLAZING UNIT FOR SIZE 120x120 AND LARGER

\*\*MINIMUM ROOF PITCH OF 5 DEGREES ON THE G-RANGE IN SIZES 140X140 AND 120X 220 SUITS A ROOF PITCH OF 5-15

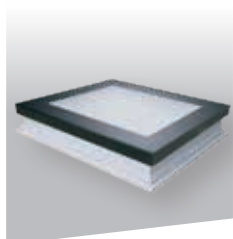
\*\*\*DOES NOT INCLUDE REMOTE CONTROL

**Escape** - the **DRL** roof access door is an innovative product providing safe and comfortable access to the flat roof. Its structural durability and range of sizes provide the perfect combination with a loft ladder.

			SMOKE AND HEAT EXHAUST VENTILATION FLAT ROOF WINDOWS		FLAT ROOF ACCESS WINDOWS			ESCAPE
								
DXC	DMC	DEC***	DSF	DSC	DRF	DRC	DRG NEW	DRL
								
<ul style="list-style-type: none"> <li>• Suitable for pitches from 0-15°,</li> <li>• Dome made of durable polycarbonate in a transparent or an opaque version.</li> <li>• Can be mounted on an additional XRD base with a height of 15cm.</li> </ul>			<ul style="list-style-type: none"> <li>• Suitable for roof pitches between 0° and 15°. When installing, windows must be level.</li> <li>• The frame constructed of multi-chamber PVC profiles filled with insulation material.</li> <li>• The sash raises easily to a height of 23cm when used for everyday ventilation.</li> <li>• In the event of fire the sash raises to 50cm.</li> </ul>		<ul style="list-style-type: none"> <li>• Suitable for pitches from 2-15°,</li> <li>• Suitable for pitches from 0-15°,</li> <li>• Suitable for pitches from 2-15°,</li> <li>• Easy and convenient operation thanks to gas springs.</li> <li>• Sash opened to 80° ( 90x120 and 120x120 opened to 60° )</li> <li>• Can be mounted on an additional XRD/W base with a height of 15cm (e.g. for installation in green roofs).</li> </ul>			<ul style="list-style-type: none"> <li>• Suitable for pitches from 0-5°,</li> <li>• Designed to be installed together with FAKRO loft ladders LML type (comprehensive solution providing convenient access to the flat roof).</li> <li>• Easy and convenient operation thanks to gas springs.</li> <li>• Sash opened to 60°.</li> </ul>

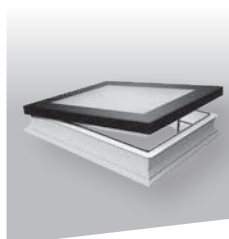
## FLAT ROOF WINDOWS

- The D\_F non-domed flat roof window is characterised by exceptional thermal insulation qualities and innovative design.
- The type F flat roof window is suitable for roof pitches between 2° and 15°.
- The flat roof window can be also mounted on an additional base with a height of 15cm.
- Window design allows for the installation of internal and external accessories.
- Secure version.
- ColourLine version.
- Joining gutters available on request.



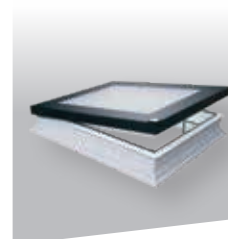
**DXF**

- Non-opening.



**DMF**

- Opened manually by means of ZSD control rod 2.2m long included.
- Sash tilts 30cm.



**DEF**

**NEW**

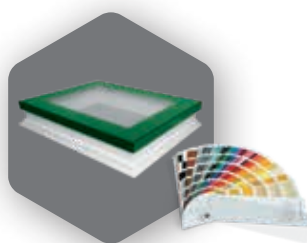
**DEF SOLAR**

**DEF**

- Electrically opened with wireless Z-Wave system.
- Included in the kit: AC adaptor, rain sensor.
- Sash tilts 15cm.

**DEF Solar**

- Powered by solar energy through the included PV panel with a built-in battery.
- The window is completely energy autonomous, convenient operation with the wireless Z-Wave system
- Included in the kit: rain sensor
- ZRH12 remote control has to be bought separately



*D\_F ColourLine are available in any colour from RAL Classic palette. PRICES ON APPLICATION*

### FLAT ROOF WINDOWS

dimensions [cm]		60x60	60x90	70x70	80x80	90x90	90x120	100x100	100x150	120x120	140x140	120x220
Minimum roof opening [cm]		60x60	60x90	70x70	80x80	90x90	90x120	100x100	100x150	120x120	140x140	120x220
Maximum roof opening [cm]		65x65	65x95	75x75	85x85	95x95	95x125	105x105	105x155	125x125	145x145	125x225
Effective glazed area [m²]		0.23	0.37	0.33	0.46	0.6	0.83	0.77	1.21	1.16	1.63	2.23
size symbol		01K	02K	03K	04K	05K	06K	07K	10K	08K	09K	11K
NON OPENING	<b>DXF DU6</b> DU6 - High energy efficient triple glazed unit. U-value of window 0.70	£1052	£1137	£1167	£1174	£1316	£1461	£1419	£1751	£1701	£2192	£2817
	<b>DXF DU8</b> DU8 - Passive quadruple glazed unit. U-value of window 0.64	£1336	£1440	£1472	£1487	£1552	£1823	£1794	£2208	£2128	£4103	£5454
	<b>DXF DU6 Secure*</b> DU6 - High energy efficient triple glazed unit. U-value of window 0.70	-	-	-	-	£1456	£1609	£1578	-	£1877	-	-
MANUALLY OPENING	<b>DMF DU6</b> DU6 - High energy efficient triple glazed unit. U-value of window 0.70	£1144	£1238	£1278	£1287	£1440	£1581	£1541	£1915	£1846	£2453	£2941
	<b>DMF DU8</b> DU8 - Passive quadruple glazed unit. U-value of window 0.64	£1431	£1549	£1603	£1612	£1805	£1976	£1923	£2382	£2331	-	-
	<b>DMF DU6 Secure*</b> DU6 - High energy efficient triple glazed unit. U-value of window 0.70	-	-	-	-	£1634	£1801	£1750	-	£2106	-	-
ELECTRICALLY OPENING	<b>DEF DU6</b> DU6 - High energy efficient triple glazed unit. U-value of window 0.70	£1447	£1527	£1564	£1570	£1736	£1881	£1841	£2170	£2117	£2841	£3615
	<b>DEF DU6 SOLAR</b> DU6 - High energy efficient triple glazed unit. U-value of window 0.70	£1490	£1573	£1611	£1618	£1788	£1938	£1896	£2235	£2181	£2927	£3724
	<b>DEF DU8</b> DU8 - Passive quadruple glazed unit. U-value of window 0.64	£1757	£1841	£1901	£1915	£2065	£2274	£2222	£2635	£2562	-	-

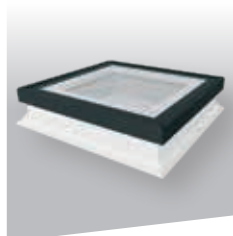
\*DU6 SECURE WINDOW OFFERS INCREASED LEVELS OF SECURITY AND ACHIEVES ANTI-BURGLARY RC2 AS PER EN1627 (DOCUMENT Q)

**ACCESSORIES**  
pages 65-67



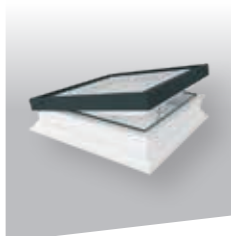
## FLAT ROOF WINDOWS

- The new range of technologically advanced G windows are based on the high performing C and F range, to give smart aesthetics and provide a alternative solution for bringing natural daylight into rooms below a flat roof.
- The flat roof window can be also mounted on an additional base with a height of 15cm.
- The structure of the window enables installation of internal accessories.
- Suitable for roof pitches 2° to 15°. Please note that for larger windows (DXG, DMG, DEG) with dimensions starting from 140x140 up to 120x220, the required roof pitch is 5-15 degrees.
- Joining gutters available on request.
- Hinges positioned on short side of the window.



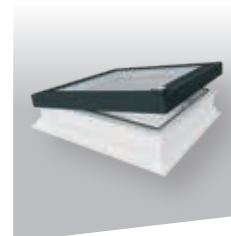
**DXG**

- Non-opening.



**DMG**

- Opened manually by means of ZSD control rod 2.2m long included.
- Sash tilts 30cm.



**DEG**

- Electrically opened with wireless Z-Wave system.
- Included in the kit: AC adaptor, rain sensor.
- Sash tilts 15cm.
- ZRH12 remote control has to be bought separately

### FLAT ROOF WINDOWS

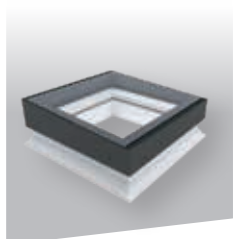
dimensions [cm]	60x60	60x90	70x70	80x80	90x90	90x120	100x100	100x150	120x120	140x140	120x220
Minimum roof opening [cm]	60x60	60x90	70x70	80x80	90x90	90x120	100x100	100x150	120x120	140x140	120x220
Maximum roof opening [cm]	65x65	65x95	75x75	85x85	95x95	95x125	105x105	105x155	125x125	145x145	125x225
Effective glazed area [m²]	0.23	0.37	0.33	0.46	0.6	0.83	0.77	1.21	1.16	1.63	2.23
size symbol	01K	02K	03K	04K	05K	06K	07K	10K	08K	09K	11K
NON OPENING DXG P2 P2 - Anti-burglary double glazed unit. U-value of window 0.92	£631	£687	£731	£733	£828	£955	£910	£1184	£1149	£1520	£2096
MANUALLY OPENING DMG P2 P2 - Anti-burglary double glazed unit. U-value of window 0.92	£796	£888	£913	£946	£1052	£1262	£1169	£1730	£1427	£2082	£2629
ELECTRICALLY OPENING DEG P2 P2 - Anti-burglary double glazed unit. U-value of window 0.92	£1156	£1205	£1335	£1243	£1357	£1650	£1600	£2000	£1800	£2756	£3500

ACCESSORIES  
pages 65-67

## FLAT ROOF WINDOWS

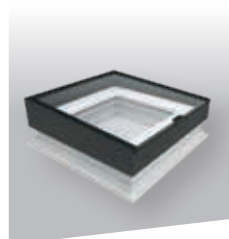


- The type Z windows are built based on the design of the type G windows. A specially constructed glass segment with a slope on the outer surface allows drainage of water even when the window is fitted perfectly horizontally in relation to the roofline.
- A new line of the D\_Z windows offers the widest range of applications, complementing the FAKRO flat roof window range. The new line comes in two versions:
  - D\_Z-A, high quality and very good parameters combined with modern aesthetics,
  - D\_Z-B, high thermal insulation performance with the product.
- The type Z flat roof window is suitable for roof pitches 0°.
- Window design allows for the installation of internal and external accessories.



### D\_Z-A AMZ/Z

- The D\_Z-A AMZ/Z version with factory fitted AMZ/Z-Wave awning blind in 308 colour is a premium class product, with a high thermal insulation performance.
- High quality and parameters is characterized by high aesthetics of the glass segment performance.
- The profiles have a rounded finish and have an invisible welded connection.
- The internal finish is White PVC.
- The 50mm glazing edge is black and the glued glass technology gives a modern look and perfectly matches with modern architecture design requirements.
- The Window is equipped with a P2 Laminated Anti-Burglary Double Glazing Unit.
- Available in versions:
  - DEZ-A – Electrically operated with wireless Z-Wave system, no remote included.
  - DMZ-A – Manually operated
  - DXZ-A – Non-opening.



### D\_Z-B AMZ/Z

- The D\_Z-B AMZ/Z version with factory fitted AMZ/Z-Wave awning blind in 308 colour is a premium class product, with a high thermal insulation performance.
- The type D\_Z-B is an economical version of type A for tighter build budgets compared to type A.
- The external profiles are straight finished and are jointed with rivets.
- The Glazing is mechanically fastened (with the bottom edge of the glass sheet free).
- The internal finish is White PVC.
- The Window is equipped with a P2 Laminated Anti-Burglary Double Glazing Unit.
- Available in versions:
  - DEZ-B – Electrically operated with wireless Z-Wave system, no remote included.
  - DMZ-B – Manually operated
  - DXZ-B – Non-opening.

#### FLAT ROOF WINDOWS

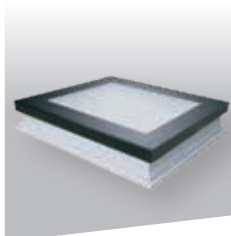
		60x60	60x90	70x70	80x80	90x90	90x120	100x100	120x120
dimensions [cm]		60x60	60x90	70x70	80x80	90x90	90x120	100x100	120x120
Minimum roof opening [cm]		60x60	60x90	70x70	80x80	90x90	90x120	100x100	120x120
Maximum roof opening [cm]		65x65	65x95	75x75	85x85	95x95	95x125	105x105	125x125
Effective glazed area [m²]		0.23	0.37	0.33	0.46	0.6	0.83	0.77	1.16
size symbol		01K	02K	03K	04K	05K	06K	07K	08K
NON OPENING	<b>DXZ-A P2 AMZ/Z</b> P2 - Anti-burglary double glazed unit. U-value of window 0.95	£1300	£1400	£1450	£1500	£1550	£1800	£1850	£2000
	<b>DXZ-B P2 AMZ/Z</b> P2 - Anti-burglary double glazed unit. U-value of window 0.95	£1100	£1150	£1200	£1250	£1300	£1350	£1400	£1500
MANUALLY OPENING	<b>DMZ-A P2 AMZ/Z</b> P2 - Anti-burglary double glazed unit. U-value of window 0.95	£1404	£1512	£1566	£1620	£1674	£1944	£1998	£2160
	<b>DMZ-B P2 AMZ/Z</b> P2 - Anti-burglary double glazed unit. U-value of window 0.95	£1250	£1300	£1350	£1400	£1450	£1650	£1700	£1850
ELECTRICALLY OPENING	<b>DEZ-A P2 AMZ/Z</b> P2 - Anti-burglary double glazed unit. U-value of window 0.95	£1685	£1814	£1879	£1944	£2009	£2333	£2398	£2592
	<b>DEZ-B P2 AMZ/Z</b> P2 - Anti-burglary double glazed unit. U-value of window 0.95	£1550	£1650	£1750	£1850	£1950	£2150	£2300	£2450

ACCESSORIES  
pages 65-67



## WALK ON FLAT ROOF WINDOWS

- An abundance of natural light in buildings with flat roofs.
- The frame of the flat roof window is constructed of multi-chamber PVC profiles filled with insulation material. The upper part of the window comes with an innovative flat glazing unit.
- The window comes with passive, double-chamber glazing unit with a U-value of 0.50 W/m<sup>2</sup>K.
- Suitable for roof pitches between 0° and 15°.
- Can be mounted on an additional XRD/W base and allows you to raise the window above the flat roof by an additional 15cm.



### DXW

- Non-opening.
- Providing a surface level with the roof and a special non-slip coating to ensure complete safety when walking across it.
- Enhanced load capacity.
- High resistance to break-in attempts thanks to reinforced design.
- Reduced heat loss ( $U_w=0.70 \text{ W/m}^2\text{K}$ ).
- Modern design and high quality finish.
- Quick and easy installation.
- Profiles which clamp the covering material and facilitate the finish of the window connection with the roofing material included as standard.

#### WALK ON FLAT ROOF WINDOWS

dimensions [cm]	60x60	60x90	70x70	80x80	90x90	90x120	100x100	120x120
Effective glazed area [m <sup>2</sup> ]	0.23	0.37	0.33	0.46	0.6	0.83	0.77	1.16
size symbol	01K	02K	03K	04K	05K	06K	07K	08K

#### DXW DW6

U-value of window 0.70

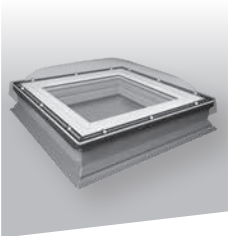
£1658	£1780	£1841	£1867	£2064	£2271	£2210	£2679
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NON  
OPENING

FLAT ROOF WINDOWS

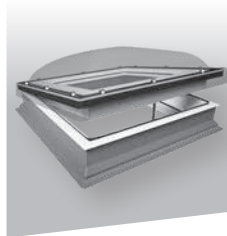
## DOMED FLAT ROOF WINDOWS

- Provides a large amount of natural light.
- Wide range of sizes.
- Window design allows for the installation of internal and external accessories.
- The domed flat roof window is intended for installation in a roof with a pitch of 0°-15°.
- The flat roof window can be also mounted on an additional base with a height of 15cm.
- Secure version.
- Joining gutters available on request.



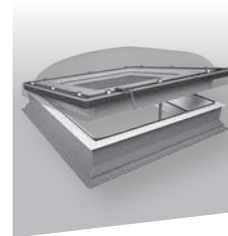
**DXC**

- Non-opening.



**DMC**

- Opened manually by means of ZSD control rod 2.2m long included.
- Sash tilts 30cm.



**DEC**

- Electrically opened with wireless Z-Wave system.
- Included in the kit: AC adaptor, rain sensor.
- Sash tilts 15cm.
- ZRH12 remote control has to be bought separately

### FLAT ROOF WINDOWS

dimensions [cm]		60x60	60x90	70x70	80x80	90x90	90x120	100x100	100x150	120x120	140x140	120x220
Minimum roof opening [cm]		60x60	60x90	70x70	80x80	90x90	90x120	100x100	100x150	120x120	140x140	120x220
Maximum roof opening [cm]		65x65	65x95	75x75	85x85	95x95	95x125	105x105	105x155	125x125	145x145	125x225
Effective glazed area [m²]		0.23	0.37	0.33	0.46	0.6	0.83	0.77	1.21	1.16	1.63	2.23
size symbol		01K	02K	03K	04K	05K	06K	07K	10K	08K	09K	11K
NON OPENING	<b>DXC-C P2</b> P2 - Anti-burglary double glazed unit. U-value of window 1.2	£522	£560	£612	£590	£678	£780	£736	£954	£921	£1311	£1764
	<b>DXC-C P4 Secure*</b> P4 - Anti-burglary double glazed unit. U-value of window 1.2	-	-	-	-	£903	£979	£955	-	£1178	-	-
MANUALLY OPENING	<b>DMC-CP2</b> P2 - Anti-burglary double glazed unit. U-value of window 1.2	£726	£804	£829	£833	£952	£1062	£1031	£1322	£1280	£1681	£2265
	<b>DMC-C P4 Secure*</b> P4 - Anti-burglary double glazed unit. U-value of window 1.2	-	-	-	-	£1090	£1215	£1183	-	£1464	-	-
ELECTRICALLY OPENING	<b>DEC-C P2</b> P2 - Anti-burglary double glazed unit. U-value of window 1.2	£1049	£1089	£1141	£1121	£1215	£1325	£1278	£1511	£1476	£2091	£2795
	<b>DEC-C U8(VSG)</b> U8 (VSG) - Passiv quadruple glazed unit. U-value of window 0.72**	£1580	£1652	£1702	£1713	£1884	£2065	£2004	£2369	£2309	-	-

\* P4 SECURE WINDOW OFFERS INCREASED LEVELS OF SECURITY AND ACHIEVES ANTI-BURGLARY RC2 AS PER EN1627 (DOCUMENT Q)

\*\* THIS WINDOW DOES NOT HAVE PASSIVE CERTIFICATION

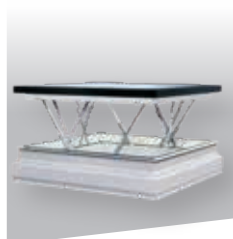
ACCESSORIES  
pages 65-67



## SMOKE VENTILATION FLAT ROOF WINDOWS

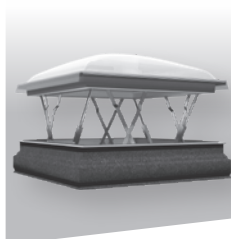


- DSF, DSC smoke ventilation flat roof windows are used for extraction of smoke and heat emitted in a building during a fire. This is a perfect solution for stairwells where under normal operating conditions this window serves the purpose of room ventilation and lighting.
- FAKRO smoke ventilation windows combine the standard function of a roof window with that of automatic smoke evacuation in a single product.
- Suitable for roof pitches between 0° and 15°. When installing, windows must be level.



**DSF**

- Smoke ventilation flat roof window.



**DSC**

- Smoke ventilation flat roof window with a dome made of durable polycarbonate. The window is offered in two versions:
  - **DSC-C2 P2** with **2** actuators to raise the sash
  - **DSC-C4 P2** with **4** actuators to raise the sash.



- **DSF DU6** – dedicated control panel RZN4408K
  - 1no smoke sensor OSD23 – 1no breakglass RT45.
- **DSC-C2 P2** – dedicated control panel RZN4404K – 1no smoke sensor OSD23 – 1no break glass RT45.
- **DSC-C4 P2** – version with four actuators compatible with a standard control unit RZN 4408-K RZN 4404-K

### SMOKE VENTILATION WINDOWS

dimensions [cm]	105x105	120x120
Effective geometric area [m²]	1,00	1,32
Aerodynamic free area of the product [m²]	0,49	0,61
size symbol	<b>12K</b>	<b>08K</b>

<b>DSF DU6</b> U-value = 0.79 W/m²K*	<b>£6508</b>	<b>£6761</b>
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dimensions [cm]	100x100	120x120
Effective geometric area [m²]	0,9	1,32
Aerodynamic free area of the product [m²]	0,44	0,57
size symbol	<b>07K</b>	<b>08K</b>

<b>DSC-C2 P2</b> U-value = 1.0 W/m²K*	<b>£4425</b>	<b>£4879</b>
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<b>DSC-C4 P2</b> U-value = 1.0 W/m²K*	<b>£5562</b>	<b>£6118</b>
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\* value for size 120x120

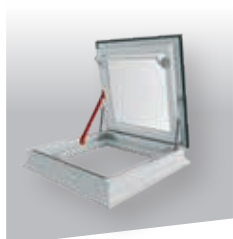
### ADDITIONAL ELEMENTS:

<b>ZRD</b> Rain sensor	<b>£89</b>
<b>LP1W</b> Ventilation switch white	<b>£57</b>
<b>LP1B</b> Ventilation switch black	<b>£57</b>

## FLAT ROOF ACCESS



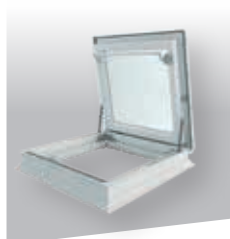
- Provide safe and convenient access to the flat roof.
- The frame is constructed of multi-chamber PVC profiles filled with insulation material.
- Can be mounted on an additional XRD/W base with a height of 15cm, for installation in green and living roofs.



**DRF**

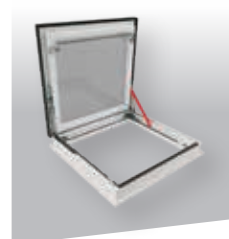
Special hinges and functional opening system used in the access roof light ensure easy sash opening up to 80°. Gas springs facilitate operation of the sash and keep it stable in the open position, thus protecting against accidental closing. What is more, access roof lights feature increased safety of use thanks to the application of anti-slip covers on their profiles window and allows its installation, e.g. in green or living roofs

- Flat access roof light without a dome.
- DRF goes with ZBR lock.
- The type F flat access roof light is suitable for roof pitches between 2° and 15°.



**DRC**

- Flat access roof light with a dome.  
The dome can be transparent (DRC-C) or opaque (DEC-M).
- The type C flat access roof light is suitable for roof pitches between 0° and 15°.



**DRG**

- Flat access roof light without a dome.
- DRG goes with ZBR lock and is compatible with ZBL/D, XRD/W.
- Is suitable for roof pitches between 2° and 15°.
- The sash opens freely up to 80° (for sizes 90x120 and 120x120 up to 65°).

### FLAT ROOF ACCESS WINDOWS

dimensions [cm]	90x90	90x120	100x100	120x120
Effective glazed area [m²]	0,6	0,83	0,77	1,16
size symbol	05K	06K	07K	08K
<b>DRF DU6</b> U-value = 0,74 W/m²K	£1687	£1867	£1810	£2194
<b>DRC-C P2, DRC-M P2</b> U-value = 0,93 W/m²K	£1179	£1247	£1177	£1459
<b>DRG P2</b> U-value = 1,00 W/m²K	£1356	£1435	£1353	£1678



## ➤ FLAT ROOF ACCESS DOOR

- The DRL roof access door is an innovative product, providing safe and comfortable access to the flat roof. Its structural durability and range of sizes provide the perfect combination with a loft ladder.
- The frame is constructed of multi-chamber PVC profiles filled with insulation material.
- Insulated sash equipped with a rubber seal ensures perfect thermal insulation performance.
- The sash can be opened up to 60°. Gas springs facilitate opening and closing and the sash can be left in open position.
- Suitable for roof pitches between 0° and 5°.



**DRL**



**+ LML**

- Sizes of the roof access door are adjusted according to the size of LML loft ladder (loft ladders are sold separately - see Loft Ladder Catalogue).

### FLAT ROOF ACCESS DOOR

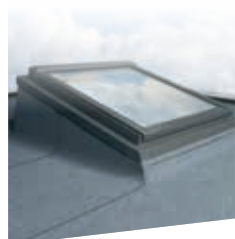
dimensions [cm]	60x120	70x120	70x130	70x140	86x130	92x130
						
<b>DRL* + LML 280 LOFT LADDER</b>	<b>£1897</b>	<b>£1962</b>	<b>£2022</b>	<b>£2087</b>	<b>£2453</b>	<b>£2530</b>
<b>DRL* + LML 305 LOFT LADDER</b>	-	-	<b>£2062</b>	<b>£2131</b>	<b>£2534</b>	<b>£2595</b>

\*U-value of access door 0,67

PRICES SHOW INCLUDE FOR THE LML LOFT LADDER TO MATCH HATCH SIZE - 60X120 / 70X120 / 70X130/& 70 140CM - CEILING HEIGHT MAXIMUM 280CM  
PRICE INCLUDES THE ACCESS DOOR AND LML LOFT LADDER AS INDIVIDUAL ITEMS FOR ON SITE INSTALLATION.

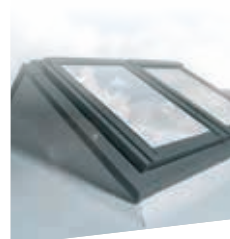
## FLAT ROOF SYSTEM EF\_

- The system enables you to provide a pitch within the window upstand and therefore enables a standard roof window to be used on a flat roof.
- The flat roof system is an ideal solution for illumination of residential or commercial spaces while retaining good insulation performance of the roof.
- It consists of two main components: a specially designed wooden base with insulation material and aluminium flashing to join the window with the housing.
- Windows in the flat roof system can be equipped with internal and external accessories.
- Suitable for roof pitches between 0° and 15°.



### EFW

- Mainly used in order to provide some more natural light when adapting attics with low pitch roof to living space, in production halls and warehouses while at the same time maintaining good thermo-insulating properties.
- An **EFW** suits our standard roof windows such as an FTP-V Z-Wave that works with a remote control. **EFS** version is to be used with smoke ventilation windows.



### EFR








#### FLAT ROOF GABLE SYSTEM

- Wooden gable structure with complete set of flashings shortens the minimum installation time. Aesthetic and highly effective solution to illuminate rooms in buildings with low-angle roofs.
- Flat roof gable system ensures good thermal insulation performance using any standard FAKRO roof windows.

#### FLAT ROOF SYSTEM

windows external dimensions [cm] size symbol	55x78 01	55x98 02	55x118 16	66x98 03	66x118 04	78x98 05	78x118 06	78x140 07	78x160 13	94x118 08	94x140 09	114x118 10	114x140 11	134x98 12	94x160 80
<b>EFW</b> Kerb	<b>£347</b>	<b>£378</b>	<b>£383</b>	<b>£386</b>	<b>£390</b>	<b>£409</b>	<b>£465</b>	<b>£472</b>	<b>£533</b>	<b>£479</b>	<b>£483</b>	<b>£500</b>	<b>£518</b>	<b>£529</b>	<b>£526</b>

#### FLAT ROOF GABLE SYSTEM

Size [cm] Overall product size [cm] - (S x L x h) Flat roof opening [cm]	4 pcs.78x98 196x217x73 156x177	4 pcs.78x118 196x252x83 156x212	4 pcs.78x140 196x290x94 156x250	4 pcs.114x98 268x217x73 228x177	4 pcs.114x118 268x252x83 228x212	4 pcs.114x140 268x290x94 228x250
						
Glazing area B2/2 [m²] Product code	1,88 <b>B2/2 05</b>	2,36 <b>B2/2 06</b>	2,92 <b>B2/2 07</b>	3,04 <b>B2/2 20</b>	3,80 <b>B2/2 10</b>	4,64 <b>B2/2 11</b>
<b>EFR</b>	✓	✓	✓	✓	✓	✓

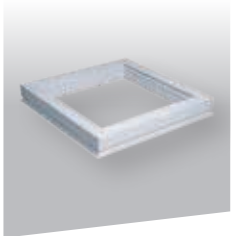
PLEASE CONTACT FAKRO SALES OFFICE FOR PRICE AND FURTHER DETAILS.





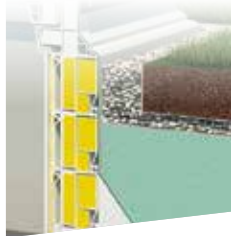
## ► INSTALLATION BASE XRD

- The XRD installation base is designed for flat roof windows type C, G, F and type Z.. It allows you to raise the window above the flat roof by an additional 15cm.
- Reduces the time it takes to install a window on a flat roof with an upstand which can raise a window up if required (e.g. green or gravel roofs).
- The profile of the XRD installation base is made of recycled material (grey colour) and is eco-friendly. The profile is filled with insulation material (polystyrene) to ensure a high standard of insulation.



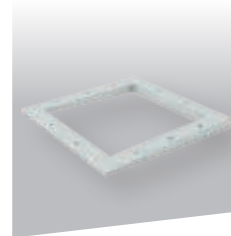
**XRD**

Versatility of the installation base enables a maximum of two bases to be stacked on top of one another to achieve greater height. The base is designed for use with the standard type C, G, F & Z flat roof windows.



**XRD/W**

Versatility of the installation base enables a maximum of three bases to be stacked on top of one another to achieve greater height. The profile of the installation base is filled with impregnated wooden blocks in sizes adapted to fit chambers of the profile of the base in order to enhance its rigidity. Bases are designed for use with DXW windows, all DRF/DRC flat access roof lights, DRL flat roof access doors. It is also used with standard type C, G, F & Z flat roof windows when there are 3 installation bases needed with single window.



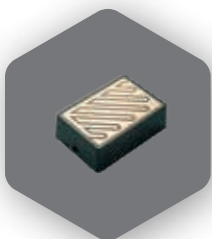
**XRD/A**

XRD/A - angled installation frame uplifting the installation angle by three degrees, to be installed with F and G type windows, used directly under the window and compatible with XRD i XRD/W frames. It enables the F&G window installation in roof pitches from 0°.

### INSTALLATION BASE XRD

dimensions [cm] size symbol	60x60 01K	60x90 02K	70x70 03K	80x80 04K	90x90 05K	90x120 06K	100x100 07K	100x150 10K	120x120 08K	140x140 09K	120x220 11K
<b>XRD</b>	£211	£222	£234	£234	£247	£272	£270	£304	£297	£345	£357
<b>XRD/W</b>	£229	£240	£254	£254	£270	£297	£292	£330	£326	£376	£387
<b>XRD/A</b>	£86	£96	£97	£97	£103	£131	£133	£166	£144	£172	£220

## ► FLAT ROOF WINDOW - ACCESSORIES



£89

**ZRD**

- It ensures automatic window closing in case of rain. ZRD is installed in the open area of the roof, directly exposed to weather conditions.



£52

**ZBR**

- ZBR lock protects against unintentional closure of the sash caused by accidental push or strong gusts wind.



£50

**ZBL/D**

- ZBL/D lock enables closing the window with the key everywhere where it is necessary to protect the roof against unauthorized entrance. The lock is compatible with all standard DRF and DRC windows and DRL roof access door.

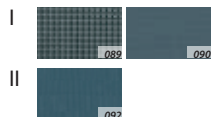


### AMZ/F Solar awning blind

- For type F roof windows.
- Comfortable, automatic operation of the blind (intelligent system controls the awning blind depending on the insolation level). Photovoltaic panel acts a sensor and reacts to solar radiation. High insolation levels trigger the awning blind to unroll automatically. In cloudy weather, the awning blind rolls back up automatically without any user intervention.
- Powered by a solar battery pack.

Control:

- Automatic operation or remote control.

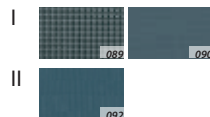


### AMZ/C Z-Wave awning blind

- For type C roof windows.
- Opened with wireless Z-Wave system.
- Innovative profile system enables installation of the awning blind under the window's dome.
- Powered from the mains.

Control:

- Remote control or wall switch.



#### FLAT ROOF WINDOW ACCESSORIES

dimensions [cm]	60x60	60x90	70x70	80x80	90x90	90x120	100x100	100x150	120x120	140x140	120x220
size symbol	01K	02K	03K	04K	05K	06K	07K	10K	08K	09K	11K
<b>AMZ/F Solar I</b>	£656	£656	£678	£678	£695	£706	£695	£845	£724	£911	£1 074
<b>AMZ/F Solar II</b>	£695	£695	£719	£719	£741	£752	£741	£905	£770	£970	£1 145
<b>AMZ/C Z-Wave I</b>	£312	£320	£325	£330	£346	£634	£356	£670	£680	£706	£782
<b>AMZ/C Z-Wave II</b>	£358	£365	£376	£379	£398	£725	£409	£763	£774	£809	£892

ALL FLAT ROOF ACCESSORIES ARE TO SPECIAL ORDER.

NOTE - THE MATERIAL SAMPLE COLOURS PRINTED CAN DIFFER IN COLOUR TO THE ACTUAL PRODUCT DUE TO PHOTOGRAPHIC PROCESSES - SAMPLE SWATCHES ARE AVAILABLE UPON REQUEST TO THE SALES OFFICE.

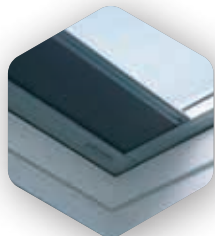


**Blackout  
blinds  
ARF/D**

- Very good protection from sunlight.
- The possibility of darkening the room.
- Possibility to lock the blind in any position.
- Partial protection from solar heat.

Control:

- Operated by means of ZSD control rod.

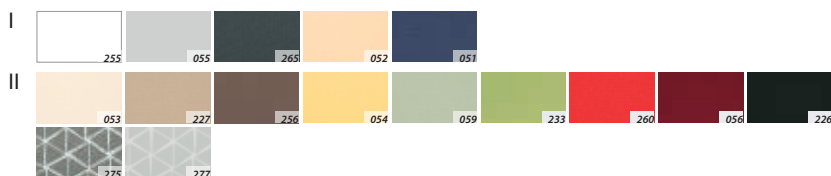


**Blackout  
blinds  
ARF/D Z-Wave**

**Blackout  
blinds  
ARF/D SOLAR**

**NEW**

- Opened with wireless Z-Wave system.
  - Powered from the mains.
- Control:
- Remote control or wall switch.
  - Powered by electricity from the photovoltaic panel situated at the back of the blind on the glass side.



#### FLAT ROOF WINDOW ACCESSORIES

dimensions [cm] size symbol	60x60 01K	60x90 02K	70x70 03K	80x80 04K	90x90 05K	90x120 06K	100x100 07K	100x150 10K	120x120 08K	140x140 09K	120x220 11K
<b>ARF/D I</b>	<b>£79</b>	<b>£79</b>	<b>£86</b>	<b>£90</b>	<b>£97</b>	<b>£106</b>	<b>£106</b>	-	<b>£108</b>	<b>£130</b>	-
<b>ARF/D II</b>	<b>£87</b>	<b>£87</b>	<b>£93</b>	<b>£98</b>	<b>£105</b>	<b>£118</b>	<b>£118</b>	-	<b>£120</b>	<b>£131</b>	-
<b>ARF/D Z-Wave I</b>	<b>£292</b>	<b>£292</b>	<b>£299</b>	<b>£301</b>	<b>£310</b>	<b>£314</b>	<b>£314</b>	<b>£355</b>	<b>£340</b>	-	-
<b>ARF/D Z-Wave II</b>	<b>£300</b>	<b>£300</b>	<b>£305</b>	<b>£310</b>	<b>£316</b>	<b>£323</b>	<b>£323</b>	<b>£362</b>	<b>£347</b>	-	-
<b>ARF/D Solar I</b>	<b>£305</b>	<b>£305</b>	<b>£316</b>	<b>£318</b>	<b>£327</b>	<b>£329</b>	<b>£329</b>	<b>£377</b>	<b>£355</b>	-	-
<b>ARF/D Solar II</b>	<b>£311</b>	<b>£311</b>	<b>£322</b>	<b>£325</b>	<b>£334</b>	<b>£336</b>	<b>£336</b>	<b>£385</b>	<b>£362</b>	-	-

NOTE - THE MATERIAL SAMPLE COLOURS PRINTED CAN DIFFER IN COLOUR TO THE ACTUAL PRODUCT DUE TO PHOTOGRAPHIC PROCESSES - SAMPLE SWATCHES ARE AVAILABLE UPON REQUEST TO THE SALES OFFICE.



A source of natural light should be available in any living space. Unfortunately, there are interiors in which the use of vertical or roof windows is not feasible. Rooms devoid of daylight are dark and uncomfortable. To ensure illumination in such places, installing a light tunnel will channel natural light to the centre. Light tunnels can constitute the main or additional light source in any room.



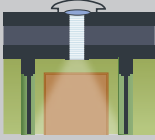




The light tunnel carries daylight via the light transmitting tube. Sunlight is reflected from the walls of the highly reflective tube and is directed downwards to the diffuser.

The diffuser which is fitted in the ceiling evenly distributes natural light, illuminating the room.

The amount of light entering the room is dependent on the location of the dome. When planning the installation of the light tunnel, the following elements should be taken into account:

- Place the dome on a south facing roof which is the most illuminated part of the roof and avoid shady places.
- Locate the light transmitting tube in such a way that it travels the shortest possible distance between roof and ceiling.
- Install the light tunnel to ensure the best possible tension (light tunnel with flexible tube).

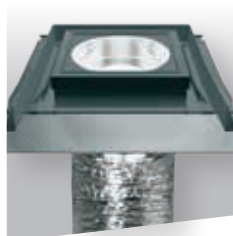
# LIGHT TUNNELS

LIGHT TUNNELS		LIGHT TUNNELS FOR FLAT ROOFS	
LIGHT TUNNELS WITH FLEXIBLE LIGHT TRANSMITTING TUBE	LIGHT TUNNELS WITH RIGID LIGHT TRANSMITTING TUBE	LIGHT TUNNEL WITH FLEXIBLE LIGHT TRANSMITTING TUBE	LIGHT TUNNEL WITH RIGID LIGHT TRANSMITTING TUBE
			
SF flat	SR dome	SFF	SRF
		with a dome made of durable polycarbonate	
			
<ul style="list-style-type: none"> <li>• The light tunnel provides natural light to all rooms in the building.</li> <li>• The flexible light transmitting tube is ideal for installation in rooms with structural obstacles that have to be bypassed (reducing installation time).</li> </ul>	<ul style="list-style-type: none"> <li>• The light tunnel provides natural light to all rooms in the building.</li> <li>• Reflective layer (using pure silver) applied in the production of elements of the light transmitting tube is characterized by light reflective factors of 98%.</li> </ul>	<ul style="list-style-type: none"> <li>• Illumination with natural light for <b>all rooms under flat roofs</b>.</li> <li>• Suitable for pitches from 0-15°.</li> </ul>	



## ► LIGHT TUNNELS WITH FLEXIBLE TUBE

- The light tunnel enables illumination of all rooms in the building, even those which cannot be fitted with roof windows or vertical windows.
- Using light tunnels in rooms devoid of daylight lets natural light inside for better illumination. In other rooms, the light tunnel can constitute an additional light source, enhancing the user's comfort and saving energy.
- It carries daylight via the light transmitting tube. Sunlight is reflected from the walls of the flexible, reflective tube and is directed downwards to the diffuser. The diffuser which is fitted in the ceiling evenly distributes natural light, illuminating the room.
- Suitable for pitches from 15° – 60°.



### SF\_

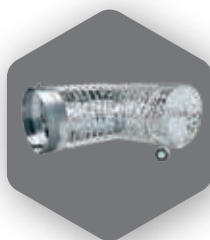
- **SF\_** - flat. Equipped with integrated flashing.
- Equipped with integrated flashing. Three types of flashings are available: for flat, corrugated and high profile roof coverings.

#### LIGHT TUNNELS SF\_

light tunnel diameter [cm]	35	55
tube length [cm]	210	210
<b>SFS</b> for flat roof coverings	<b>£310</b>	<b>£436</b>
<b>SFZ</b> for corrugated roof coverings	<b>£310</b>	<b>£436</b>
<b>SFH</b> for high profile roof coverings	<b>£310</b>	<b>£436</b>
<b>SFL</b> for slate roof coverings	<b>£310</b>	<b>£436</b>

#### ACCESSORIES FOR LIGHT TUNNELS

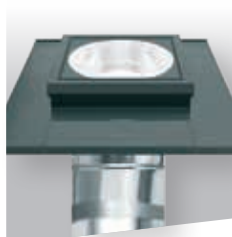
light tunnel diameter [cm]	35	55
<b>SLM 30</b> Flexible light transmitting tube extension kit, standard length 30cm	<b>£65</b>	<b>£75</b>
<b>SLM 60</b> Flexible light transmitting tube extension kit, standard length 60cm	<b>£77</b>	<b>£90</b>
<b>SLM 90</b> Flexible light transmitting tube extension kit, standard length 90cm	<b>£88</b>	<b>£103</b>
<b>SLM 120</b> Flexible light transmitting tube extension kit, standard length 120cm	<b>£80</b>	<b>£112</b>
<b>SLM 210</b> Flexible light transmitting tube extension kit, standard length 210cm	<b>£136</b>	<b>£168</b>
<b>SLO</b> Light Kit	<b>£57</b>	<b>£59</b>





## ► LIGHT TUNNELS WITH RIGID TUBE

- They can be used in any room, but due to minimum light loss they are recommended for special buildings in which natural light must be transmitted over long distances (e.g. 12m).
- They come with a rigid light transmitting tube which is made of aluminum and covered with a reflective silver layer reflecting 98% of light (the interior of the tube looks like a mirror). This design lets much more natural light into the room.
- The light tunnels consists of collecting light, a flashing rigid light transmitting tube, elbow, diffuser and ceiling frame.\*
- Suitable for pitches from 15° – 60° and flat roofs.



### SR\_

- **SR\_** - flat. Equipped with integrated flashing.
- Equipped with integrated flashing. Three types of flashings are available: for flat, corrugated and high profile roof coverings.

#### LIGHT TUNNELS SR\_

light tunnel diameter [cm]	35	55
tube length [cm]	210	180*
<b>SRS</b> for flat roof coverings	<b>£413</b>	<b>£634</b>
<b>SRZ</b> for corrugated roof coverings	<b>£413</b>	<b>£634</b>
<b>SRH</b> for high profile roof coverings	<b>£413</b>	<b>£634</b>
<b>SRL</b> for slate roof coverings	<b>£413</b>	<b>£634</b>

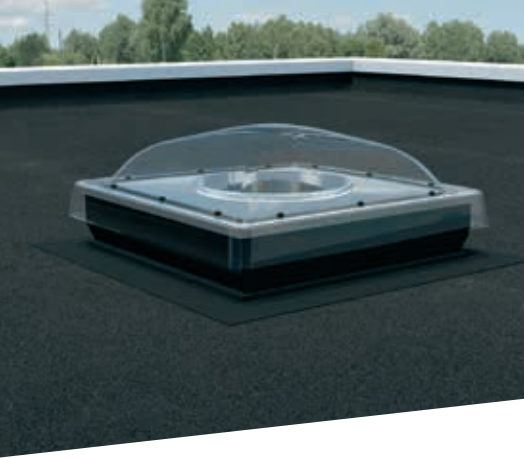
#### ACCESSORIES FOR LIGHT TUNNELS

light tunnel diameter [cm]	35	55
<b>SRM 61</b> Rigid light transmitting tube extension element, standard length 61cm	<b>£95</b>	<b>£125</b>
<b>SRK</b> Elbow	<b>£127</b>	<b>£245</b>
<b>SLO</b> Light Kit	<b>£57</b>	<b>£59</b>



\* SRK is an optional extra for the 550

## ▶ FLAT ROOF LIGHT TUNNELS



- Flat roof light tunnels make it possible to illuminate all rooms under flat roofs with natural light.
- A great addition due to its design of the type C flat roof window with a dome that ensures high durability and tightness.
- Installation of light tunnels allows daylight to rooms under flat roofs.
- Base of the light tunnel is filled inside with insulation material to secure excellent thermal insulation performance.
- Light tunnels are suitable for roofs with pitches from 0° – 15°.



**SFF**

- The light tunnel with the flexible light transmitting tube which allows the light tunnel with the flexible light transmitting tube can bypass potential structural obstacles. The tube length is 210cm.



**SRF**

- The light tunnel with the rigid light transmitting tube with a length of 61cm.
- The tube can be extended using a special SRM extension kit.

### LIGHT TUNNELS

light tunnel diameter [cm]	35	55
tube length [cm]	210	210
<b>SFF</b>	<b>£437</b>	<b>£732</b>

light tunnel diameter [cm]	35	55
tube length [cm]	61	61
<b>SRF</b>	<b>£542</b>	<b>£841</b>








## LOFT LADDERS

FOLDING LOFT LADDERS enable safe and easy access to loft spaces without the need for costly and space-consuming staircases. FAKRO ladders satisfy all technical and safety requirements whilst maximising ease of use and comfort.

FAKRO offers a choice of wood and metal loft ladders to satisfy the needs of each individual customer and home. All FAKRO folding ladders offer a high degree of thermal efficiency.

**All loft ladders compliant with EN 14975.**

NEW




LOFT LADDER TYPE	LWK Komfort	LTK Energy	LWF 60	LMF 120	LST
	 <b>U=1.1 W/m²K</b>	 <b>U=0.68 W/m²K</b>	 <b>EN 13501-2 EI<sub>1</sub> 60</b> <b>U=0.64* W/m²K</b>	 <b>EN 13501-2 EI<sub>1</sub> 120</b> <b>U=0.79 W/m²K</b>	 <b>U=1.1 W/m²K</b>
Room height [cm]	280, 305			280, 305	250-280
Box	pinewood			metal	pinewood
Hatch	thermo-insulating	extra thermo-insulating	fire-resistant	fire-resistant	thermo-insulating
Hatch colour	white	white	white	white	white
Ladder	pinewood			metal	metal
Treads	non-slip treads set flush with ladder strings			metal, anti-slip	metal, anti-slip
Thermal insulation thickness	3 cm	6 cm	7.9 cm	8cm	3 cm
Hatch thickness	3.6 cm	6.6 cm	8.5 cm	8.2 cm	3.6 cm
<b>Maximum loading</b>	<b>160 kg</b>	<b>160 kg</b>	<b>160 kg</b>	<b>200 kg</b>	<b>200 kg</b>

\*MANUFACTURER'S INTERNAL RESEARCH.



## L-SHAPED COMBINATION DOORS

In addition to having a wide range of loft ladders FAKRO also manufacture combination loft doors for installation in walls. These are used to provide access to unused space behind a wall or under stairs. Three models are available, the first and most basic model, the **DWK** insulating door having a 3.6cm thick sash. For added thermal efficiency and airtightness the **DWT** provides a U-value of 0.6 and offers Class 4: EN 12207 performance. Where fire resistance is required, the **DWF** offers double-sided protection (fire classification EI<sub>1</sub>45 EN 13501-2), as well as exceptional airtightness and thermal insulation.

DOOR TYPE	DWK	DWT	DWF
	 <b>U=1.1 W/m²K</b>	 <b>U=0.6 W/m²K</b> <b>4 CLASS EN12207</b>	 <b>U=0.64 W/m²K</b> <b>4 CLASS EN12207</b> <b>EN 13501-2 EI<sub>1</sub> 45</b>
	<b>INSULATED</b>	<b>HIGHLY ENERGY EFFICIENT</b>	<b>FIRE-RESISTANT</b>
Sash structure	Frame made of pinewood clad on both sides with HDF board and filled inside with insulation material		
Sash colour	white		
Opening	right or left side		
Closing	universal handle with a lock		
Finishing trims	3.5 cm wide wooden in a natural colour		
Thermal insulation thickness	3 cm	6 cm	
Sash thickness	3.6 cm	6.6 cm	



Simply check the height and width dimensions for your chosen window, and see the choice of products available based on the P2 glazing unit.

		WIDTH in cm					
		55	66	78	94	114	134
HEIGHT in cm	60			FNP *	FNP *	FNP *	FNP *
	78	FTP-V PTP	FWR FWL FTP-V PTP-V PTP	FNP/D * FTP-V PTP-V PTP	FNP/D * FTP-V PTP-V PTP	FNP/D * FTP-V PTP-V PTP	FNP/D * FTP-V PTP-V PTP
98	98	FTP-V FPP-V PTP PPP-V	FTP-V FPP-V PTP PPP-V FWR FWL	FTP-V FPP-V PTP PPP-V FWR FWL	FWL	FTP-V PTP-V PTP	FTP-V FPP-V
	118	FTP-V FPP-V PTP PPP-V	FTP-V FPP-V PTP PPP-V FWR FWL	FTP-V FPP-V PTP PPP-V FWR FWL	FTP-V FPP-V PTP PPP-V FWR FWL	FTP-V FPP-V PTP FSP FWR FWL	FTP-V PTP-V PTP
140	140	FTP-V FPP-V PTP PPP-V	FTP-V FPP-V PTP PPP-V	FTP-V FPP-V PTP PPP-V FYP-V FHP FWR FWL	FTP-V FPP-V PTP PPP-V FYP-V FHP FWR FWL	FTP-V FPP-V PTP-V FSP	
	160			FYP-V FTP-V PTP-V PTP FPP-V	FYP-V FTP-V PTP-V ** PTP **		
180	180			FYP-V	FYP-V		
	186			FDY-V	FDY-V		
206	206			FDY-V FYP-V	FDY-V FYP-V		
	235			FDY-V ***	FDY-V ***		
255	255			FDY-V ***	FDY-V *** FGH-V P2		

		WIDTH in cm			WIDTH in cm	
		78	94	114	46	54
HEIGHT in cm	60	BDL BDR BXP	BXP	BXP	WGT	
	75	BDL BDR BXP	BDL BDR BXP		WGI/C	
98	98	BDL BDR	BDL BDR	BDL BDR	WGT WGI	
	98					WLI/C

Flat Roof Windows

		WIDTH in cm					
		55	66	78	94	114	134
HEIGHT in cm	78	EFW					
	98	EFW	EFW	EFW			EFW
118	118		EFW	EFW	EFW	EFW	
	140			EFW	EFW	EFW	

## FAKRO Light Tunnels

FAKRO Light Tunnels are available with either flexible or rigid ducting. Either product may also be purchased with an abutment accessory for fitting on flat roofs.

SLT	SRT	SF	SR	SFF/SFR
35/200	25/200	35/200	35/200	35/200
55/200	35/200	55/200	55/200	55/200

## Conservation Roof Windows

FAKRO supplies the widest range of products and sizes in conservation style. See each section in the price list for full details.



NOTE: THE SIZES NOT STATED IN THE PRICE LIST AVAILABLE TO INDIVIDUAL ORDERS. PRICES ON REQUEST.

\* NON-OPENING WINDOWS. PRICES ON REQUEST  
 \*\* PTP-V P2, PTP P2 RECOMMENDED FOR THE ROOFS WITH PITCH FROM 25 DEGREE  
 \*\*\* AVAILABLE TO INDIVIDUAL ORDERS. PRICES ON REQUEST









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