

**ROOF
WINDOWS**
PRODUCT SELECTOR
AND PRICE LIST
MAY 2020



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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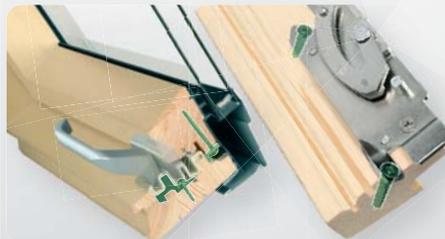
WHAT MAKES A FAKRO ROOF WINDOW BETTER?

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.



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.

10 year warranty for window

20 year warranty for glazing unit

∞ 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 and a 20 year warranty on glazing units. We also offer a no quibble lifetime warranty against damage by hail stones.



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.



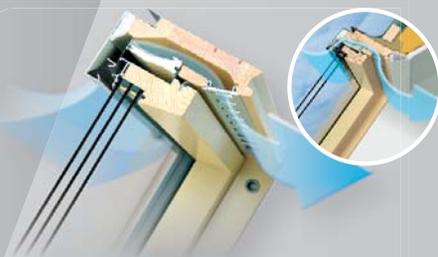
thermoPro technology HIGH ENERGY SAVINGS

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.



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.



Automatic Controlled Ventilation

The FAKRO V40P 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.



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/m²K 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, top hung and side 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.



TÜV SÜD accreditation is currently less well known in the UK but in 2011 UKAS appointed it as a notified organisation for construction products. TÜV SÜD partners manufacturers of all kinds of building materials to ensure that quality, safety and environmental sustainability requirements are met. By securing accreditation, FAKRO has once again been among the first to confirm its commitment to key quality standards.



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

thermoPro Technology

PROFI and LUX class 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 the window's energy-efficiency performance



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.



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.



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 installation process of roof windows.



System topSafe



INCREASED SECURITY

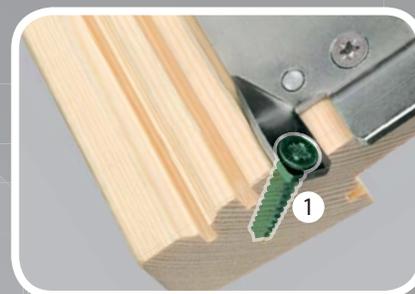
Roof windows have to ensure safety of use and protect against unauthorised access to the room from the roof.

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.**

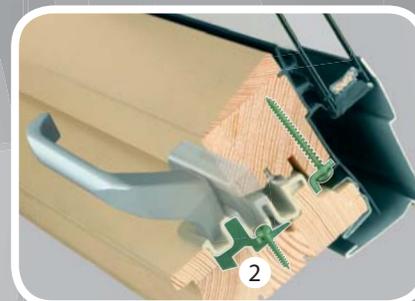
The topSafe system consists of:



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



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.

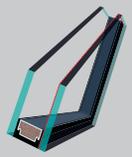
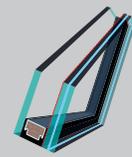
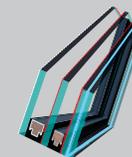
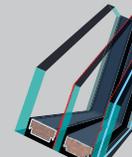
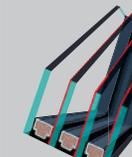
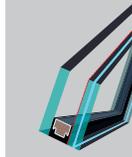
Top hung and pivot dual function roof windows provide total flexibility of use. When open, the top hung function provides an unrestricted field of view at a lower height than a centre pivot window while centre pivot operation enables the sash to be rotated through 180° to clean the outer pane from within 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								
															
material	wood			PVC			wood			PVC			wood		
natural pine	FPP-V P2 preSelect	FPP-V O2 preSelect	FPP-V P5 preSelect	-	-	-	FTP-V U3	FTP-V P2	FTP-V O2	FTP-V P5	FTP R1	-	-	-	FTP-V P2 Z-Wave
white acrylic	FPW-V P2 preSelect	FPW-V O2 preSelect	FPW-V P5 preSelect	-	-	-	-	FTW-V P2	FTW-V O2	FTW-V P5	-	-	-	-	FTW-V P2 Z-Wave
white polyurethane	FPU-V P2 preSelect	FPU-V O2 preSelect	FPU-V P5 preSelect	-	-	-	-	FTU-V P2	FTU-V O2	FTU-V P5	FTU R1	-	-	-	FTU-V P2 Z-Wave
white PVC	-	-	-	PPP-V P2 preSelect	PPP-V O2 preSelect	PPP-V P5 preSelect	-	-	-	-	-	PTP-V P2	PTP-V O2	PTP-V P5	-
conservation version:	+	+	+	+	+	+	+	+	+	+	+	+		+	+
view															
air inlet				V35							non-vented	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
glazing	double	double	triple	double	double	triple	double	double	double	triple	double	double	double	triple	double
Ug (EN 673)	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	1,0 W/m²K	1,0 W/m²K	0,5 W/m²K	1,0 W/m²K	1,0 W/m²K	1,0 W/m²K	0,5 W/m²K	1,0 W/m²K
Uw	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	1,3 W/m²K	1,3 W/m²K	0,97 W/m²K	1,3 W/m²K	1,3 W/m²K	1,3 W/m²K	1,1 W/m²K	1,3 W/m²K
topSafe system	+			+			+				+			+	
acoustic insulation	35 dB	35 dB	35 dB	33 dB	35 dB	36 dB	32 dB	35 dB	35 dB	35 dB	39 dB	33 dB	33 dB	36 dB	35 dB
handle	elegant			elegant white			elegant				elegant white			elegant	
seals	4			4			4				4			4	
installation pitch	15-55°			15-55°			15-90°				15-90°			15-90°	

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		PVC		wood	wood			wood		wood		wood		wood		
FTP-V P5 Z-Wave	-	-	FTP-V P2 Secure	FTT U8 Thermo	FTT U6	FTT R3	FYP-V P2 proSky	FYP-V P5 proSky	FDY-V P2 Duet proSky	FGH-V P2 Galeria	FGH-V P5 Galeria	BD_P2, BVP P2, BX P P2	BD_P5, BVP P5, BX P P5	FWR P2 / FWL P2		
FTW-V P5 Z-Wave	-	-	FTW-V P2 Secure	FTT/W U8 Thermo	FTT/W U6	FTT/W R3	-	-	-	-	-	BD_AWP2, BVWP2, BXWP2	BD_AWP5, BVWP5, BXWP5	-		
FTU-V P5 Z-Wave	-	-	FTU-V P2 Secure	FTT/U U8 Thermo	FTT/U U6	FTT/U R3	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, BVU P2, BXU P2	BD_U P5, BVU P5, BXU P5	FWR/U P2 FWL/U P2		
-	PTP-V P2 Z-Wave	PTP-V P5 Z-Wave	-	-	-	-	-	-	-	-	-	-	-	-		
+	+	+	-	-	-	-	+	+	+	-	-	-	-	+		
		V35				non-vented							-		-	
up to 49 m³/h		up to 41 m³/h		up to 49 m³/h		-			up to 49 m³/h		up to 49 m³/h		-		-	
triple		double		triple		double		quaduple		triple		triple		double		
0,5 W/m²K		1,0 W/m²K		0,5 W/m²K		1,0 W/m²K		0,3 W/m²K		0,5 W/m²K		0,5 W/m²K		1,0 W/m²K		
0,97 W/m²K		1,3 W/m²K		1,1 W/m²K		1,3 W/m²K		0,58 W/m²K		0,80 W/m²K		0,81 W/m²K		1,0 W/m²K		
+		+		+		+			+		+		-		-	
35 dB		33dB		36 dB		35 dB		36 dB		38 dB		42 dB		35 dB		
33 dB		36 dB		35 dB		36 dB			38 dB		42 dB		35 dB			
elegant		elegant white		elegant		elegant			elegant		elegant		elegant		standaard	
4		4		4		5			4		4		4		2	
15-90°		15-90°		15-90°		15-70°			20-65°		25-65°		35-55°		45-55°	
35 dB		33dB		36 dB		35 dB		36 dB		38 dB		42 dB		35 dB		
elegant		elegant white		elegant		elegant			elegant		elegant		elegant		standaard	
4		4		4		5			4		4		4		2	
15-90°		15-90°		15-90°		15-70°			20-65°		25-65°		35-55°		45-55°	

R3	G6	O2
8H-16-4HT-18-33.2SIT	6HST-12-33.1T	4HO-14-33.1T
SOUND REDUCING	SOLAR CONTROL	OBSCURE
TRIPLE	DOUBLE	DOUBLE
(CLASS P2A)	✓	✓

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

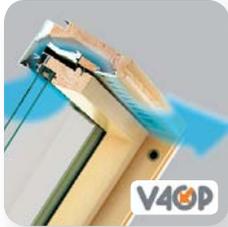


CENTRE PIVOT WINDOWS



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°.



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 [m ²]	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															
FTP-V P2 P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£244	£259	£270	£282	£301	£281	£318	£351	£437	£396	£410	£422	£459	£405	£433
FTP-V O2 O2 - OBSCURE double glazed unit. U-value of window 1.3	£321	£338	£373	£355	£380	£373	£413	£449	£546	£494	£520	£531	£580	£527	£584
FTP R1 R1 - Sound reducing glazed unit, Rw 39 dB non vented, U-value of window 1.3	£326	£337	£353	£359	£390	£367	£404	£463	£541	£479	£525	£536	£551	£520	£597
FTP-V U3 U3 - Energy saving double glazed unit. Toughened outer pane. U-value of window 1.3	£242	£257	£268	£280	£299	£279	£316	£349	£435	£394	£408	£420	£457	£403	£431
WHITE ACRYLIC															
FTW-V P2 P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£244	£259	£270	£282	£301	£281	£318	£351	£437	£396	£410	£422	£459	£405	£433
FTW-V O2 O2 - OBSCURE double glazed unit. U-value of window 1.3	£349	£361	£380	£391	£412	£391	£435	£483	£567	£520	£525	£551	£590	£546	£578

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
EZV-A for interlocking tiles up to 45mm profile	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
ELV for non-interlocking slate up to 10mm thick	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
EPV for plain tiles up to 16mm thick	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
EHN-A for interlocking tiles up to 90mm profile	£65	£66	£70	£75	£75	£75	£78	£83	£93	£88	£92	£92	£101	£98	£96

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



► CENTRE PIVOT WINDOWS



IN WHITE POLYURETHANE AND PVC 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°.



FTU-V



PTP-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.

- 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.

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	94x160
effective glazing area [m ²]	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															
FTU-V P2 P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£306	£323	£337	£362	£376	£351	£397	£439	£544	£483	£513	£527	£582	£506	£541
FTU-V O2 O2 - OBSCURE double glazed unit. U-value of window 1.3	£356	£374	£387	£405	£427	£402	£449	£492	£592	£544	£568	£583	£613	£561	£596
FTU R1 R1 - Sound reducing glazed unit, R _w 39 dB non vented, U-value of window 1.3	£392	£410	£423	£453	£462	£437	£483	£525	£684	£578	£598	£612	£686	£591	£626
PVC															
PTP-V P2 P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£265	£282	£294	£298	£326	£306	£347	£383	£461	£418	£449	£459	£485	£441	£472
PTP-V O2 O2 - OBSCURE double glazed unit. U-value of window 1.3	£344	£365	£378	£384	£395	£396	£436	£499	£570	£503	£528	£563	£607	£565	£673

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
EZV-A for interlocking tiles up to 45mm profile	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
ELV for non-interlocking slate up to 10mm thick	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
EPV for plain tiles up to 16mm thick	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
EHN-A for interlocking tiles up to 90mm profile	£65	£66	£70	£75	£75	£75	£78	£83	£93	£88	£92	£92	£101	£98	£96

FULL FLASHING KIT
SELECTION
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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 ²]	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	FPP-V P2 preSelect P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3											
	£398	£408	£416	£416	£439	£486	£602	£535	£568	£584	£631	£560
NATURAL PINE	FPP-V O2 preSelect O2 - OBSCURE double glazed unit. U-value of window 1.3											
	£494	£500	£517	£511	£541	£581	£667	£595	£639	£647	£698	£651
WHITE ACRYLIC	FPW-V P2 preSelect P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3											
	£398	£408	£416	£416	£439	£486	£602	£535	£568	£584	£631	£560
WHITE ACRYLIC	FPW-V O2 preSelect O2 - OBSCURE double glazed unit. U-value of window 1.3											
	£494	£500	£517	£511	£541	£581	£667	£593	£639	£647	£698	£651



A unique, innovative 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
EZV-A for interlocking tiles up to 45mm profile	£56	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83
ELV for non-interlocking slate up to 10mm thick	£56	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83
EPV for plain tiles up to 16mm thick	£56	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83
EHN-A for interlocking tiles up to 90mm profile	£66	£75	£75	£75	£78	£83	£93	£88	£92	£92	£101	£98

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 AND PVC 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



PPP-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

- 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 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 ²]	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
WHITE POLYURETHANE												
FPU-V P2 preSelect P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£447	£469	£488	£473	£514	£569	£696	£577	£665	£683	£722	£689
FPU-V O2 preSelect O2 - OBSCURE double glazed unit. U-value of window 1.3	£525	£530	£546	£541	£560	£616	£723	£602	£713	£731	£752	£716
PVC												
PPP-V P2 preSelect P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£507	£513	£535	£535	£576	£623	-	£646	£674	£692	£767	-
PPP-V O2 preSelect O2 - OBSCURE double glazed unit. U-value of window 1.3	£660	£660	£715	£715	£770	£825	-	£858	£913	£913	£1029	-



A unique, innovative 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
EZV-A for interlocking tiles up to 45mm profile	£56	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83
ELV for non-interlocking slate up to 10mm thick	£56	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83
EPV for plain tiles up to 16mm thick	£56	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83
EHN-A for interlocking tiles up to 90mm profile	£66	£75	£75	£75	£78	£83	£93	£88	£92	£92	£101	£98

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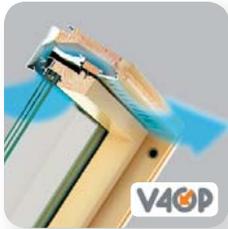
* ALL WINDOWS AVAILABLE IN NON VENTED ON REQUEST

▶ WINDOWS WITH HIGHLY ENERGY-EFFICIENT TRIPLE GLAZING



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.
- Traditional centre pivot operation.
- 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.



FPP-V
preSelect
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.



FPW-V
preSelect
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.

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	114x118	114x140	134x98	94x160
effective glazing area [m ²]	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															
FPP-V P5 preSelect P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	-	£659	-	£659	£675	£675	£714	£763	-	£789	£855	-	-	-	-
FTP-V P5 P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£409	£424	£435	£458	£466	£446	£483	£516	P0A	£577	£575	£587	£671	£570	£598
WHITE ACRYLIC															
FPW-V P5 preSelect P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	-	£652	-	£652	£669	£669	£707	£755	P0A	£782	£846	-	-	-	-
FTW-V P5 P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£409	£424	£435	£454	£466	£446	£483	£516	£677	£572	£575	£587	£665	£570	£598

STANDARD FLASHING KITS FOR USE WITH TRIPLE GLAZED 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
EZV-A for interlocking tiles up to 45mm profile	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
ELV for non-interlocking slate up to 10mm thick	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
EPV for plain tiles up to 16mm thick	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
EHN-A for interlocking tiles up to 90mm profile	£65	£66	£70	£75	£75	£75	£78	£83	£93	£88	£92	£92	£101	£98	£96

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



▶ WINDOWS WITH HIGHLY ENERGY-EFFICIENT TRIPLE GLAZING

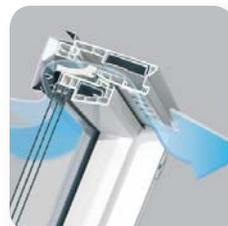
IN WHITE POLYURETHANE AND PVC FINISH

- Top hung and pivot windows come with two independent opening mechanisms.
- The sash can be opened outwards from the top and via centre pivot.
- Traditional centre pivot operation.
- 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.
- Ideal for bathrooms, wetrooms, kitchens and environments with increased humidity.



FPU-V
preSelect
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.



PPP-V
preSelect
PTP-V

- 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 HIGHLY ENERGY-EFFICIENT TRIPLE GLAZING IN NATURAL PINE 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 ²]	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																
FPU-V P5 preSelect P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	-	£719	-	£719	£745	£745	£780	£836	-	£871	£923	-	-	-	-	
FTU-V P5 P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£471	£488	£502	£525	£541	£516	£562	£604	£768	£672	£678	£692	£806	£671	£706	
PVC																
PPP-V P5 preSelect P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 1.1	-	£794	-	£794	£843	£843	£910	£977	-	-	-	-	-	-	-	
PTP-V P5 P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 1.1	£494	£530	£550	£550	£592	£592	£638	£720	-	£730	£760	-	-	-	-	

STANDARD FLASHING KITS FOR USE WITH TRIPLE GLAZED 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
EZV-A for interlocking tiles up to 45mm profile	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
ELV for non-interlocking slate up to 10mm thick	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
EPV for plain tiles up to 16mm thick	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
EHN-A for interlocking tiles up to 90mm profile	£65	£66	£70	£75	£75	£75	£78	£83	£93	£88	£92	£92	£101	£98	£96

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

▶ WINDOWS WITH ELECTRIC Z-WAVE 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.
- 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°.



- 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 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 [m ²]	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															
FTP-V P2 Z-Wave P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£554	£569	£580	£601	£611	£591	£628	£661	£784	£714	£720	£732	£792	£715	£743
FTP-V P5 Z-Wave P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£719	£734	£745	£763	£776	£756	£793	£826	-	£878	£885	-	-	-	-
WHITE ACRYLIC															
FTW-V P2 Z-Wave P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£554	£569	£580	£607	£611	£591	£628	£661	£792	£721	£720	£732	£800	£715	£743
FTW-V P5 Z-Wave P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£719	£734	£745	£763	£776	£756	£793	£826	-	£878	£885	-	-	-	-

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
EZV-A for interlocking tiles up to 45mm profile	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
ELV for non-interlocking slate up to 10mm thick	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
EPV for plain tiles up to 16mm thick	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
EHN-A for interlocking tiles up to 90mm profile	£65	£66	£70	£75	£75	£75	£78	£83	£93	£88	£92	£92	£101	£98	£96

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

▶ WINDOWS WITH ELECTRIC Z-WAVE CONTROL



IN WHITE POLYURETHANE AND PVC 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.
- 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

- 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.



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 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 ²]	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															
FTU-V P2 Z-Wave P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£616	£633	£647	£670	£686	£661	£707	£749	855,00	£804	£823	£837	£866	£816	£851
FTU-V P5 Z-Wave P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£781	£798	£812	£835	£851	£826	£872	£914	-	£969	£988	-	-	-	-
PVC															
PTP-V P2 Z-Wave P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£659	£675	£685	£690	£700	£700	£726	£773	£814	£778	£958	£973	£994	£963	£865
PTP-V P5 Z-Wave P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 1.1	£857	£878	£891	£898	£932	£932	£973	-	-	-	-	-	-	-	-

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
EZV-A for interlocking tiles up to 45mm profile	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
ELV for non-interlocking slate up to 10mm thick	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
EPV for plain tiles up to 16mm thick	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
EHN-A for interlocking tiles up to 90mm profile	£65	£66	£70	£75	£75	£75	£78	£83	£93	£88	£92	£92	£101	£98	£96

FULL FLASHING KIT
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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.



ZWS 12 **ZWS 230**

£273

£303

ZWS 12
ZWS 230

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



£111

ZRW7

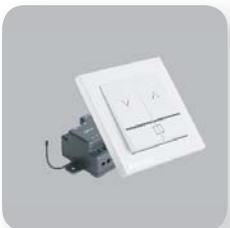
- Z-Wave wall keyboard control can operate up to 12 of FAKRO Z-Wave devices in each of the seven groups.



£106

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.



£141

ZWL1

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



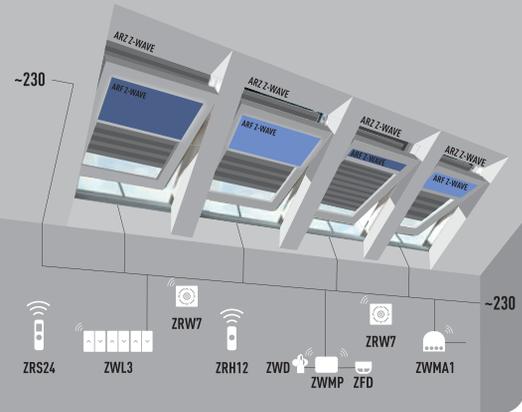
£141

ZWL2

- 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.

FOR FURTHER ADVICE ON ELECTRICAL COMPONENTS PLEASE REFER TO THE FOLLOWING LINK
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.



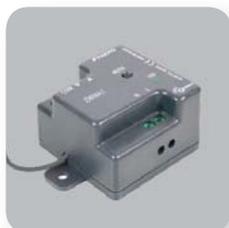
ZZ 60 **ZZ 60H**

£104

£104

ZZ 60 ZZ 60H

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



£94

ZWMA 1

- 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).



£187

ZWMA4

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



£144

ZWMP

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



£81

ZRD

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



£65

ZWD

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



£90

ZFD

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

FOR FURTHER ADVICE ON ELECTRICAL COMPONENTS PLEASE REFER TO THE FOLLOWING LINK
FAKRO.CO.UK/INSTALLINGELECTRICBLINDS

▶ HIGH ENERGY-EFFICIENT PIVOT WINDOWS

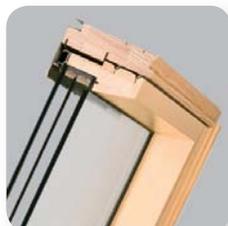
IN NATURAL PINE

- 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.



FTT R3

- High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with natural acrylic lacquer.
- Triple glazed and fivefold seals.
- Sound reduction glazing unit (Rw =42dB).

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 ²]	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
FTT U8 Thermo U8 - Passive quadruple glazed unit. U-value of window 0.58*	-	£1016	£1067	£1081	£1134	£1142	£1271	£1406	£1634	£1464	£1510	£1524	£1712	£1552	£1852
FTT U6 U6 - High energy efficient triple glazed unit. U-value of window 0.80	-	£588	£614	£614	£651	£651	£736	£814	£945	£852	£875	£879	£983	£930	£1073
FTT R3 R3 - Sound reducing triple glazed unit. U-value of window 0.81	-	£616	£648	£648	£688	£684	£775	£860	£999	£902	£926	£932	£1052	£950	£1138

*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 & FTT R3 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
EZV-A for interlocking tiles up to 45mm profile	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
ELV for non-interlocking slate up to 10mm thick	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
EPV for plain tiles up to 16mm thick	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
EHN-A for interlocking tiles up to 90mm profile	£65	£66	£70	£75	£75	£75	£78	£83	£93	£88	£92	£92	£101	£98	£96

**FULL FLASHING KIT
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**THERMO INSULATED FLASHING KITS ARE AVAILABLE FOR USE WITH THE FTT U6 & R3 WINDOWS.
SEE PAGE 32-33 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



FTT/W R3
FTT/U R3

- 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.

- 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.
- Sound reduction glazing unit (Rw =42dB).

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 ²]	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															
FTT/W U8 Thermo U8 - Passive quadruple glazed unit. U-value of window 0.58*	-	£1049	£1102	£1114	£1169	£1178	£1310	£1448	£1685	£1510	£1556	£1569	£1763	£1595	£1907
FTT/W U6 U6 - High energy efficient triple glazed unit. U-value of window 0.80	-	£588	£614	£614	£651	£651	£736	£814	£945	£852	£875	£879	£983	£930	£1073
FTT/W R3 R3 - Sound reducing triple glazed unit. U-value of window 0.81	-	£616	£648	£648	£688	£684	£775	£860	£999	£902	£926	£932	£1052	£950	£1138
WHITE POLYURETHANE															
FTT/U U8 Thermo U8 - Passive quadruple glazed unit. U-value of window 0.58*	-	£1089	£1151	£1157	£1220	£1226	£1365	£1512	£1748	£1576	£1627	£1644	£1835	£1668	£1985
FTT/U U6 U6 - High energy efficient triple glazed unit. U-value of window 0.80	-	£645	£673	£673	£712	£712	£810	£893	£1038	£933	£961	£967	£1093	£989	£1181
FTT/U R3 R3 - Sound reducing triple glazed unit. U-value of window 0.81	-	£680	£712	£712	£756	£756	£852	£960	£1099	£991	£1018	£1025	£1158	£1045	£1252

*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 & FTT R3 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
EZV-A for interlocking tiles up to 45mm profile	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
ELV for non-interlocking slate up to 10mm thick	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
EPV for plain tiles up to 16mm thick	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
EHN-A for interlocking tiles up to 90mm profile	£65	£66	£70	£75	£75	£75	£78	£83	£93	£88	£92	£92	£101	£98	£96

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THERMO INSULATED FLASHING KITS ARE AVAILABLE FOR USE WITH THE FTT U6 & R3 WINDOWS. SEE PAGE 32-33 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 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 ²]		0.85	0.92	1.19	1.07	1.22	1.46
size symbol		13	40	42	80	41	43
NATURAL PINE	FYP-V P2 proSky P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£630	£689	£756	£714	£777	£842
	FYP-V P5 proSky P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£943	£1040	£1126	-	£1178	-
WHITE ACRYLIC	FYW-V P2 proSky P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£697	£772	£835	£781	£878	£964
	FYW-V P5 proSky P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£985	£1114	£1222	-	£1265	-
WHITE POLYURETHANE	FYU-V P2 proSky P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£718	£781	£851	£809	£905	£991
	FYU-V P5 proSky P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£1019	£1136	£1243	-	£1285	-

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
EZV-A for interlocking tiles up to 45mm profile	£74	£78	£77	£82	£86	£130
ELV for non-interlocking slate up to 10mm thick	£74	£78	£77	£82	£86	£130
EPV for plain tiles up to 16mm thick	£74	£78	£77	£82	£86	£130
EHN-A for interlocking tiles up to 90mm profile	£95	£118	£134	£97	£137	£150

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

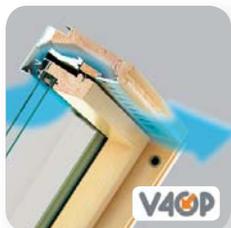


▶ WINDOWS WITH RAISED AXIS OF ROTATION – HIGH PIVOT Duet proSky

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°.

HIGH PIVOT WINDOWS



FDY-V
Duet proSky



FDY-V/U
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.

- 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	£887	£1031	1077,3	£956	£1098	£1147
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	£995	£1157	1199	£1050	£1210	£1264

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	£124	£137	£139	£139	£153	£166
ELV for non-interlocking slate up to 10mm thick	£124	£137	£139	£139	£153	£166
EPV for plain tiles up to 16mm thick	£124	£137	£139	£139	£153	£166
EHN-A for interlocking tiles up to 90mm profile	£137	£147	149,1	£155	£172	£187

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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 ²]	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

- DOUBLE GLAZED

BDL P2, BDR P2

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

£503	£558	£604	£672	£743	£596	£662	-	£715
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BVP P2

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

£362	£380	£402	£452	£497	£422	£448	£449	£467
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BXP P2

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

£295	£307	£319	£356	£386	£331	£347	£402	£444
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- TRIPLE GLAZED

BDL P5, BDR P5

P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.88

£712	£773	£844	£934	£1030	£836	£924	-	£995
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BVP P5

P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.88

£596	£626	£657	£747	£808	£697	£727	£737	£758
------	------	------	------	------	------	------	------	------

BXP P5

P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.88

£520	£545	£566	£636	£692	£596	£626	£687	£737
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NATURAL PINE

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
EUV-L/B for slate	£174	£184	£197	£193	£195	£195	£204	£202
EUV/B for tiles	£145	£152	£160	£160	£160	£160	£163	£162

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°.



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 [m ²]	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

		- DOUBLE GLAZED									
WHITE ACRYLIC	BDL/W P2, BDR/W P2 P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£533	£586	£636	£711	£780	£624	£692	-	£747	
	BVW P2 P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£415	£426	£449	£503	£551	£471	£497	£497	£513	
	BXW P2 P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£333	£348	£364	£409	£439	£379	£392	£455	£500	
	- TRIPLE GLAZED										
	BDL/W P5, BDR/W P5 P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.88	£731	-	£855	£966	£1054	£855	£932	-	-	
	BVW P5 P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.88	£636	£662	£707	£788	£869	£737	£788	£778	£808	
BXW P5 P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.88	£556	£586	£616	£687	£747	£636	£667	£737	£788		
		- DOUBLE GLAZED									
WHITE POLYURETHANE	BDL/U P2, BDR/U P2 P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£570	£601	£580	£725	£803	£642	£717	-	£773	
	BVU P2 P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£412	£434	£459	£517	£570	£485	£513	£513	£529	
	BXU P2 P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£359	£373	£390	£435	£475	£404	£426	£488	£539	
	- TRIPLE GLAZED										
	BDL/U P5, BDR/U P5 P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.88	£759	£790	£780	£1003	£1100	£889	£986	-	£990	
	BVU P5 P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.88	£646	£687	£727	£818	£899	£758	£808	£808	£828	
BXU P5 P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.88	£576	£606	£612	£707	£773	£657	£697	£758	£818		

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

	78x255	94x255	114x255
NATURAL PINE			
FGH-V P2 Galeria P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.5	£2300	£2300	£2450
FGH-V P5 Galeria P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 1.1	£2750	£2750	-
WHITE ACRYLIC			
FGH-V/W P2 Galeria P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.5	£2438	£2438	£2700
FGH-V/W P5 Galeria P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 1.1	£2872	£2872	-
WHITE POLYURETHANE			
FGH-V/U P2 Galeria P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.5	£2448	£2448	£2900
FGH-V/U P5 Galeria P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 1.1	£2882	£2882	-

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
EZV-A/G for interlocking tiles up to 45mm profile	✓	✓	✓
ELV/G for non-interlocking slate up to 10mm thick	✓	✓	✓
EPV/G for plain tiles up to 16mm thick	✓	✓	✓
EHN-A/G 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 x5mm): 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 ²]	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

CENTRE PIVOT ROOF WINDOWS																
NATURAL PINE	FTP-V/C P2 (V* Kit) P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£414	£426	£442	£473	£491	£497	£517	£558	£699	£618	£640	£654	£717	£652	£776
	FTP-V/C P2 (J* Kit) P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£436	£484	£502	£507	£555	£545	£584	£629	£742	£654	£699	£727	£768	£732	£850
	FTP-V/C P2 P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£339	£364	£369	£388	£402	£406	£455	£493	£561	£507	£523	£539	£588	£598	£632
	FTP-V/C P5 P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£562	£606	£636	£638	£673	£675	£752	£850	-	£865	£901	£934	£1020	£919	-
	FTP-V/C P2 Z-Wave P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£729	£770	£808	£810	£871	£883	£944	£974	£1008	£995	£1022	£1032	£1079	£1032	£1069
	FTP-V/C P5 Z-Wave P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£818	£859	£907	£911	£960	£972	£1058	£1115	-	£1141	-	-	-	-	-
CENTRE PIVOT ROOF WINDOWS																
WHITE ACRYLIC	FTW-V/C P2 (V*Kit) P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£418	£426	£442	£477	£491	£500	£517	£572	£705	£624	£644	£661	£719	£652	£776
	FTW-V/C P2 (J*Kit) P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£453	£483	£501	£525	£554	£566	£583	£628	£763	£677	£722	£745	£785	£731	£873
	FTW-V/C P2 P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£342	£368	£372	£392	£406	£410	£460	£498	£566	£512	£528	£544	£594	£604	£638
	FTW-V/C P5 P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£525	£556	£594	£596	£628	£630	£702	£795	-	£808	£842	£842	£952	£858	-
	FTW-V/C P2 Z-Wave P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£735	£778	£814	£816	£880	£890	£954	£984	£1018	£1005	£1032	£1044	£1090	£1044	£1082
	FTW-V/C P5 Z-Wave P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£912	£962	£1012	£1018	£1072	£1084	£1182	£1244	-	£1274	-	-	-	-	-
CENTRE PIVOT ROOF WINDOWS																
WHITE POLYURETHANE	FTU-V/C P2 P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£424	£460	£488	£488	£495	£502	£550	£638	£714	£655	£682	£704	£746	£690	£826
	FTU-V/C P5 P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£612	£666	£690	£698	£714	£736	£806	£930	-	£946	£990	£1020	£1092	£998	-
	FTU-V/C P2 Z-Wave P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£782	£820	£874	£874	£916	£922	£1005	£1048	£1094	£1070	£1108	£1110	£1165	£1110	£1158
	FTU-V/C P5 Z-Wave P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£860	£910	£970	£975	£1020	£1030	£1120	£1200	-	£1220	-	-	-	-	-
CENTRE PIVOT ROOF WINDOWS																
PVC	PTP-V/C P2 P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£435	£468	£475	£488	£504	£504	£556	£640	£720	£646	£678	£714	£784	£720	£856

* 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.

FULL FLASHING KIT
SELECTION
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& ACCESSORIES
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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 ²]	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	£558	£568	£598	£578	£626	£656	£782	£690	£744	£744	£814	£760	
	FPP-V/C P5 preSelect P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£810	£842	£865	£842	£906	£980	-	£1004	£1080	-	-	-	
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	£558	£568	£598	£578	£626	£656	£782	£690	£744	£744	£814	£760	
	FPW-V/C P5 preSelect P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97	£848	£888	£908	£882	£950	£1028	-	£1054	£1132	-	-	-	
WHITE POL.	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	£630	£636	£652	£652	£682	£730	£910	£752	£810	£816	£890	£832	
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	£785	£794	£840	£840	£898	£976	£1070	£1044	£1114	£1114	£1256	-	
	PPP-V/C P5 preSelect P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 1.1	£1032	£1032	£1092	£1092	£1192	£1278	-	-	-	-	-	-	

	windows external dimensions [cm]	55x78	55x98	55x118	66x98	66x118	78x98	78x118	78x140	78x160	94x118	94x140	114x118	114x140	134x98	94x160	
	effective glazing area [m ²]	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	-	£702	£730	£730	£775	£783	£879	£967	£1126	£1014	£1042	£1051	£1183	£1073	£1273	
	FTT/C U8 Thermo U8 - Passive quadruple glazed unit. U-value of window 0.58*	-	£1197	£1265	£1269	£1353	£1360	£1504	£1660	£1945	£1739	£1782	£1792	£2027	£1850	£2204	
WHITE POLYURETHANE	FTT/U/C U6 U6 - High energy-efficient triple glazed unit. U-value of window 0.80	-	£775	£818	£818	£863	£867	£976	£1082	£1263	£1137	£1152	£1180	£1343	£1203	£1447	
	FTT/U/C U8 Thermo U8 - Passive quadruple glazed unit. U-value of window 0.58*	-	£1426	£1504	£1504	£1582	£1582	£1782	£1982	£2285	£2062	£2116	£2116	£2383	£2173	£2585	

*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

FULL 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 ²]	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	£704	£764	£832	£798	£870	£948
WHITE ACRYLIC	FYW-V/C P2 proSky P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£720	£790	£860	£820	£900	£980
WHITE POL.	FYU-V/C P2 proSky P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£750	£810	£890	£860	£930	£1020

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 P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£972	£1060	£1188	£1050	£1205	£1252
WHITE POL.	FDY-V/U/C P2 Duet proSky P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£1066	£1164	£1305	£1154	£1324	£1376

windows external dimensions [cm]	78x60	78x75	78x95	78x115	78x137	94x75	94x95	114x75	114x95
effective glazing area [m ²]	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

	WINDOWS WITH RAISED AXIS OF ROTATION – HIGH PIVOT Duet proSky									
NATURAL PINE	BDL/C P2, BDR/C P2 P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£574	£624	£676	£754	£826	£672	£738	-	£800
	BVP/C P2 P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£470	£495	£522	£585	£645	£550	£580	£580	£600
	BXP/C P2 P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.3	£402	£420	£440	£490	£535	£460	£480	£535	£585

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

FULL FLASHING KIT
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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.
- EUV/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
EZV-A for interlocking tiles up to 45mm profile	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
EZJ-A Recessed Style for interlocking tiles up to 45mm profile	£82	£84	£88	£90	£95	£95	£99	£106	£123	£110	£118	£117	£132	£125	£122
ELV for non-interlocking slate up to 10mm thick	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
ELJ Recessed Style for non-interlocking slate up to 10mm thick	£82	£84	£88	£90	£95	£95	£99	£106	£123	£110	£118	£117	£132	£125	£122
EPV for plain tiles up to 16mm thick	£55	£56	£64	£63	£66	£66	£68	£71	£88	£76	£79	£78	£88	£83	£86
EPJ Recessed Style for plain tiles up to 16mm thick	£82	£84	£88	£90	£95	£95	£99	£106	£123	£110	£118	£117	£132	£125	£122
EHN-A for interlocking tiles up to 90mm profile	£65	£66	£70	£75	£75	£75	£78	£83	£93	£88	£92	£92	£101	£98	£96
ELV-T Thermo universal for non-interlocking slate up to 10mm thick	£106	£119	£125	£125	£127	£127	£134	£142	£161	£146	£155	£155	£161	£155	£182
EPV-T Thermo for plain tiles up to 16mm thick	£96	£106	£112	£112	£114	£114	£120	£124	£141	£131	£135	£137	£141	£138	£163
EHN-AT Thermo for interlocking tiles up to 90mm profile	£96	£106	£112	£112	£114	£114	£120	£124	£141	£131	£135	£137	£141	£138	£163
EHV-AT Thermo for interlocking tiles up to 90mm profile	£96	£106	£112	£112	£114	£114	£120	£124	£141	£131	£135	£137	£141	£138	£163
EZA ESA & EHA Lifts windows out of the roofline by 10 degrees	£257	£265	£280	£280	£294	£291	£304	£317	£377	£325	£346	£346	£377	£346	£393
EKB & Kingspan Kit A set of profiles covering the sides of the frame	£61	£69	£75	£69	£75	£69	£75	£81	£86	£75	£81	£81	£86	£75	£86
EBV Flashing for Steel Panel Sheet	£92	£96	£98	£100	£112	£112	£114	£116	£134	£118	£120	£124	£134	£128	£136

STANDARD FLASHING KITS FOR proSky WINDOWS

windows external dimensions [cm] size symbol	78x160 13	78x180 40	78x206 42	94x160 80	94x180 41	94x206 43
EZV-A for interlocking tiles up to 45mm profile	£74	£78	£77	£82	£86	£130
ELV for non-interlocking slate up to 10mm thick	£74	£78	£77	£82	£86	£130
EPV for plain tiles up to 16mm thick	£74	£78	£77	£82	£86	£130
EHN-A for interlocking tiles up to 90mm profile	£95	£118	£134	£97	£137	£150

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
EZV-A for interlocking tiles up to 45mm profile	£124	£137	£139	£139	£153	£166
ELV for non-interlocking slate up to 10mm thick	£124	£137	£139	£139	£153	£166
EPV for plain tiles up to 16mm thick	£124	£137	£139	£139	£153	£166
EHN-A for interlocking tiles up to 90mm profile	£137	£147	£149	£155	£172	£187

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
EUV-L/B for slate	£174	£184	£197	£193	£195	£195	£204	£202
EUV/B for tiles	£145	£152	£160	£160	£160	£160	£163	£162



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/C - sheet metal roof coverings e.g. zinc, copper, stainless steel.
- ELJ/C - natural and man-made slates, etc. up to 10mm thick.
- EPJ/C - plain tiles (clay, non-interlocking tiles).
- ESJ/C - shingles e.g. cedar, asphalt, felts etc.
- EZJ/C - 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
EZV-A/C for interlocking tiles up to 45mm profile	£77	£83	£91	£91	£93	£93	£95	£95	£115	£99	£105	£111	£115	£113	£121
EZJ-A/C Recessed Style for interlocking tiles up to 45mm profile	£101	£109	£115	£115	£121	£121	£123	£123	£149	£133	£139	£145	£149	£156	£162
ELV/C for non-interlocking slate up to 10mm thick	£77	£83	£91	£91	£93	£93	£95	£95	£115	£99	£105	£111	£115	£113	£121
ELJ/C Recessed Style for non-interlocking slate up to 10mm thick	£101	£109	£115	£115	£121	£121	£123	£123	£149	£133	£139	£145	£149	£156	£162
EPV/C for plain tiles up to 16mm thick	£77	£83	£91	£91	£93	£93	£95	£95	£115	£99	£105	£111	£115	£113	£121
EPJ/C Recessed Style for plain tiles up to 16mm thick	£101	£109	£115	£115	£121	£121	£123	£123	£149	£133	£139	£145	£149	£156	£162
EHN-A/C Recessed Style for interlocking tiles up to 90mm profile	£93	£98	£101	£101	£106	£103	£111	£111	£131	£113	£117	£123	£131	£127	£133

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
EZV-A/C for interlocking tiles up to 45mm profile	£115	£139	£157	£176	£194	£121	£160	£180	£198	£212
ELV/C for non-interlocking slate up to 10mm thick	£115	£139	£157	£176	£194	£121	£160	£180	£198	£212
EPV/C Recessed Style for plain tiles up to 16mm thick	£115	£139	£157	£176	£194	£121	£160	£180	£198	£212
EHN-A/C Recessed Style for interlocking tiles up to 90mm profile	£131	£152	£174	£186	£206	£133	£174	£198	£214	£232

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
EUV-L/B/C for slate	£217	£234	£250	£247	£253	£253	£265	£261
EUV/B/C for tiles	£180	£190	£198	£194	£198	£198	£208	£202



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
2 Piece Combinations B2/1, B1/2 EZV-A, ELV, EPV	£138	£140	£160	£158	£165	£165	£170	£178	£220	£190	£198	£195	£220	£208	£215
2 Piece Combinations B2/1, B1/2 EZV-A/C, ELV/C, EPV/C	£192	£207	£227	£227	£232	£232	£237	£237	£288	£247	£263	£278	£288	£283	£303
3 Piece Combinations B3/1, B1/3 EZV-A, ELV, EPV	£206	£210	£240	£236	£248	£248	£255	£266	£330	£285	£296	£293	£330	£311	£323
3 Piece Combinations B3/1, B1/3 EZV-A/C, ELV/C, EPV/C	£288	£311	£341	£341	£348	£348	£356	£356	£432	£371	£394	£417	£432	£424	£455
4 Piece Combinations B2/2 EZV-A, ELV, EPV	£275	£280	£320	£315	£330	£330	£340	£355	£440	£380	£395	£390	£440	£415	£430
4 Piece Combinations B2/2 EZV-A/C, ELV/C, EPV/C	£384	£414	£455	£455	£465	£465	£475	£475	£576	£495	£525	£556	£576	£566	£606
6 Piece Combinations B3/2, B2/3 EZV-A, ELV, EPV	£413	£420	£480	£473	£495	£495	£510	£533	£660	£570	£593	£585	£660	£623	£645
6 Piece Combinations B3/2, B2/3 EZV-A/C, ELV/C, EPV/C	£576	£621	£682	£682	£697	£697	£712	£712	£864	£742	£788	£833	£864	£848	£909

FOR SLATE & INTERLOCKING TILES UP TO 45mm PROFILE

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
2 Piece Combinations B2/1, B1/2 EHN-A	£163	£165	£175	£186	£186	£186	£194	£207	£234	£221	£231	£231	£252	£244	£221
2 Piece Combinations B2/1, B1/2 EHN-A/C	£232	£245	£253	£253	£265	£258	£278	£278	£328	£283	£293	£308	£328	£318	£283
3 Piece Combinations B3/1, B1/3 EHN-A	£244	£248	£263	£280	£280	£280	£291	£311	£350	£331	£347	£347	£378	£366	£331
3 Piece Combinations B3/1, B1/3 EHN-A/C	£348	£367	£379	£379	£398	£386	£417	£417	£492	£424	£439	£462	£492	£477	£424
4 Piece Combinations B2/2 EHN-A	£326	£331	£350	£373	£373	£373	£389	£415	£467	£441	£462	£462	£504	£488	£478
4 Piece Combinations B2/2 EHN-A/C	£465	£490	£505	£505	£530	£515	£556	£556	£657	£566	£586	£616	£657	£636	£667
6 Piece Combinations B3/2, B2/3 EHN-A	£488	£496	£525	£559	£559	£559	£583	£622	£701	£662	£693	£693	£756	£732	£717
6 Piece Combinations B3/2, B2/3 EHN-A/C	£697	£735	£758	£758	£795	£773	£833	£833	£985	£848	£879	£924	£985	£954	£1000

FOR HIGH PROFILE INTERLOCKING TILES UP TO 90mm

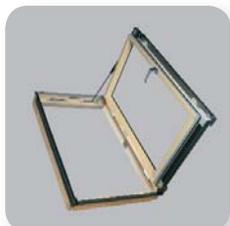
NOTE: THE DISTANCE BETWEEN WINDOWS JOINED HORIZONTALLY AND VERTICALLY IS NORMALLY 10CM. IF EXTERNAL SHUTTERS ARE INSTALLED ON WINDOWS INSTALLED VERTICALLY, A GAP OF AT LEAST 20CM IS REQUIRED. OTHER SIZED GAPS CAN BE MANUFACTURED FOR FURTHER INFORMATION PLEASE CONTACT CUSTOMER SERVICES OR EMAIL.
THE STANDARD 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

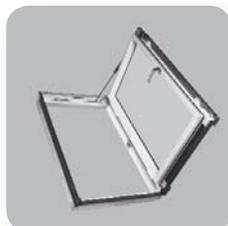
IN NATURAL PINE AND WHITE POLYURETHANE FINISH

- 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.



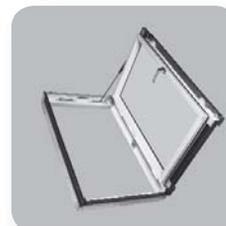
FWP

- 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

windows external dimensions [cm]	55x98	66x78	66x98	66x118	78x98	78x118
effective glazing area [m ²]	0.29	0.28	0.38	0.47	0.47	0.59
size symbol	02	22	03	04	05	06

NATURAL PINE	FWP P2					
	£410	£410	£410	£428	£525	£577
	P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.4					
NATURAL PINE	FWP P5					
	£630	£625	£660	£710	£705	£770
	P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97					
WHITE POL.	FWU P2					
	£492	£478	£520	£558	£550	£605
	P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.4					
WHITE POL.	FWU P5					
	£680	£672	£708	£762	£750	£840
	P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97					

SIDE HUNG ESCAPE WINDOW- CONSERVATION STYLE

windows external dimensions [cm]	55x98	66x78	66x98	66x118	78x98	78x118
effective glazing area [m ²]	0.29	0.28	0.38	0.47	0.47	0.59
size symbol	02	22	03	04	05	06

	FWP/C P2					
	£620	£606	£635	£665	£670	£715
	P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.4					
	FWP/C P5					
	£810	£802	£838	£888	£895	£960
	P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97					
	FWU/C P2					
	£670	£666	£695	£735	£740	£795
	P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U-value of window 1.4					
	FWU/C P5					
	£860	£852	£903	£955	£960	£1026
	P5 - Anti-burglary triple glazed unit. Class P2A U-value of window 0.97					

SIDE HUNG ESCAPE WINDOW FWW AVAILABLE ON REQUEST

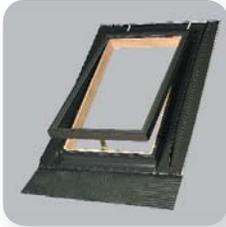
FLASHINGS FOR SIDE HUNG ESCAPE WINDOW

windows external dimensions [cm]	55x98	66x78	66x98	66x118	78x98	78x118
size symbol	02	22	03	04	05	06
EZV-A for interlocking tiles up to 45mm profile	£56	£61	£63	£66	£66	£68
ELV for non-interlocking slate up to 10mm thick	£56	£61	£63	£66	£66	£68
EPV for plain tiles up to 16mm thick	£56	£61	£63	£66	£66	£68
EHN-A for interlocking tiles up to 90mm profile	£66	£72	£75	£75	£75	£78



▶ 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	55x72

NATURAL PINE	WGT	£110	£119	-
	WGI	£131	£140	£226
	WGI/C	£172	£184	£292

ACCESS ROOF LIGHTS

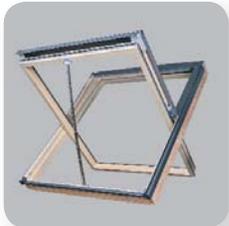
dimensions [cm]	54x83	54x98	86x87

NATURAL PINE	WLI	£203	£222	£233
	WLI/C	£260	£260	£310



SMOKE VENTILATION SYSTEMS FOR PITCHED ROOFS

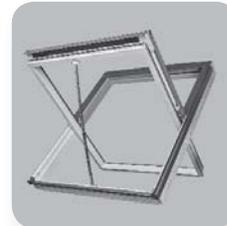
Smoke along with fire pose a serious threat to human life and health. Contrary to popular belief, 90% of fire-related deaths are a result of smoke inhalation, and not high temperatures or burning. Smoke also causes considerable damage to property. Applying appropriate smoke and heat escape systems can 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 P1

CENTRE PIVOT SMOKE VENT WINDOW

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



FSR/U P1

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	WHITE POLYURETHANE
FSR P1 10 (114 x 118cm)	Single centre pivot window with electric pack and flashing kit giving 1.0m ² of ventilation. 1no FSR P1 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-0-371 smoke detector £1666	FSR/U P1 10 (114 x 118cm)
FSR-2 P1 2 x 07 (78 x 140cm)	2no centre pivot windows with electric pack and flashing kit giving 1.5m ² of ventilation. 2no FSR P1 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 RT45 break glass alarm 1no SD-0-371 smoke detector £2710	FSR/U-2 P1 2 x 07 (78 x 140cm)
FSR P1 17 (134 x 140cm)	Single centre pivot window with electric pack and flashing kit giving 1.5m ² of ventilation. 1no FSR P1 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-0-371 smoke detector £1765	FSR/U P1 17 (134 x 140cm)

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 P1 SMOKE VENTILATION CENTRE PIVOT ROOF WINDOWS (EN 12101-2:2003)



FSR P1



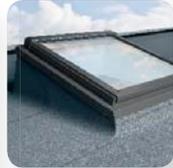
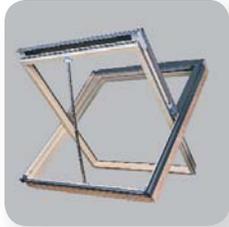
FSR ELECTRICS

VRS10FAK	£200
DEFAK021	£118
DEFAK022	£160
LT84-U	£110

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.

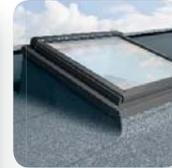
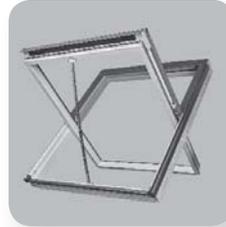
SMOKE VENTILATION SYSTEMS FOR FLAT ROOFS



FSR P1+ 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 P1+ 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.

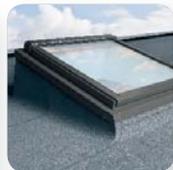
SMOKE VENTILATION SYSTEMS FOR PITCHED ROOFS

	NATURAL PINE		WHITE POLYURETHANE			
	FSR P1 +EFW 10 (114 x 118cm)	Single centre pivot window with electrics pack and flashing kit giving 1.0m ² of ventilation. 1no FSR P1 10 114x 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-0-371 smoke detector	£2000	FSR/U P1 +EFW 10 (114 x 118cm)	Single centre pivot window with electrics pack and flashing kit giving 1.0m ² of ventilation. 1no FSR/U P1 10 114x 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-0-371 smoke detector	£2000
	FSR P1 +EFW 17 (134 x 140cm)	Single centre pivot window with electrics pack and flashing kit giving 1.5m ² of ventilation. 1no FSR P1 17 134x 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-0-371 smoke detector	£2150	FSR/U P1 +EFW 17 (134 x 140cm)	Single centre pivot window with electrics pack and flashing kit giving 1.5m ² of ventilation. 1no FSR/U P1 17 134x 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-0-371 smoke detector	£2150

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.

FSR P1 SMOKE VENTILATION CENTRE PIVOT ROOF WINDOWS (EN 12101-2:2003)



FSR P1+ EFW*

FSR ELECTRICS

VRS10FAK	£200
DEFAK021	£118
DEFAK022	£160
LT84-U	£110

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



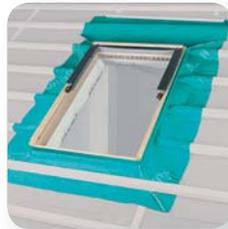
FAKRO installation accessories provide an enhanced connection between the roof window and the roof construction. Using the under felt collar with thermo-insulation and air-tight flashing ensures the complete protection of a fitted roof window. Accessories manufactured by FAKRO will prolong the life of 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.



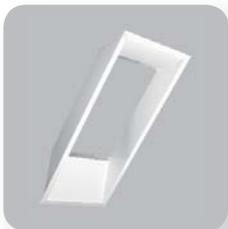
XDP

- 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_

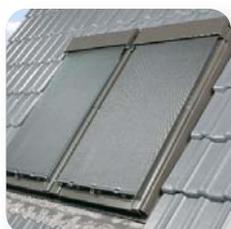
- Installed from the inside of the room.
- Made of a high quality pine in natural colour XSP on white XSW.

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
XDK	£58	£58	£58	£58	£58	£58	£58	£63	£68	£63	£63	£63	£63	£63	£68
XDP	£33	£34	£36	£36	£37	£37	£38	£40	£41	£40	£41	£43	£44	£43	£44
XDS	£34	£34	£34	£34	£34	£34	£34	£37	£39	£37	£37	£37	£37	£37	£39
XLC-F 40 & XLC-P 40	£317	£342	£348	£348	£370	£370	£386	£408	£455	£408	£420	£420	£442	£442	£469
XLC-F 30 & XLC-P 30	£245	£255	£260	£260	£275	£275	£290	£300	£340	£300	£315	£315	£330	£330	£355
XWT	£39	£39	£39	£39	£39	£39	£39	£45	£47	£45	£45	£45	£45	£45	£47
XSP,XSW	£23	£23	£23	£23	£23	£27	£27	£27	£27	£30	£30	£32	£32	£34	£30

▶ 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.



8 times
more effective

AMZ
Awning blind

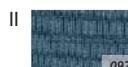
NEW LINE



ARZ
External roller shutter

- 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.

- 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 NEW LINE	£71	£71	£74	£74	£84	£87	£87	£89	£121	£96	£105	£107	£116	£114	£128
AMZ II NEW LINE	£95	£95	£104	£104	£115	£118	£118	£129	£165	£137	£143	£154	£162	£157	£182
AMZ Z-Wave I	£354	£354	£372	£372	£380	£385	£395	£405	£420	£410	£420	£430	£440	£430	£460
AMZ Z-Wave II	£382	£382	£402	£402	£410	£415	£426	£438	£454	£442	£454	£464	£475	£464	£496
AMZ Solar I	£500	£505	£514	£514	£525	£525	£530	£538	£548	£538	£548	£550	£560	£552	£566
AMZ Solar II	£525	£530	£540	£540	£552	£552	£556	£565	£575	£565	£575	£578	£588	£580	£594
EXTERNAL ROLLER SHUTTER															
ARZ-H	£304	£310	£318	£318	£330	£326	£340	£340	£365	£354	£368	£372	£385	£376	£392
ARZ Z-Wave * (No Switch)	£340	£348	£356	£356	£372	£366	£385	£395	£412	£402	£415	£418	£432	£422	£438
ARZ Solar *	£613	£624	£634	£634	£650	£650	£660	£674	-	£682	£692	£698	£716	£698	-

* RETAINING 20 CM DISTANCE BETWEEN THE WINDOWS IN VERTICAL POSITION

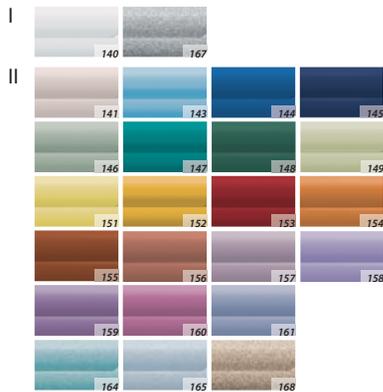
ALL EXTERNAL ACCESSORIES ARE TO SPECIAL ORDER

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



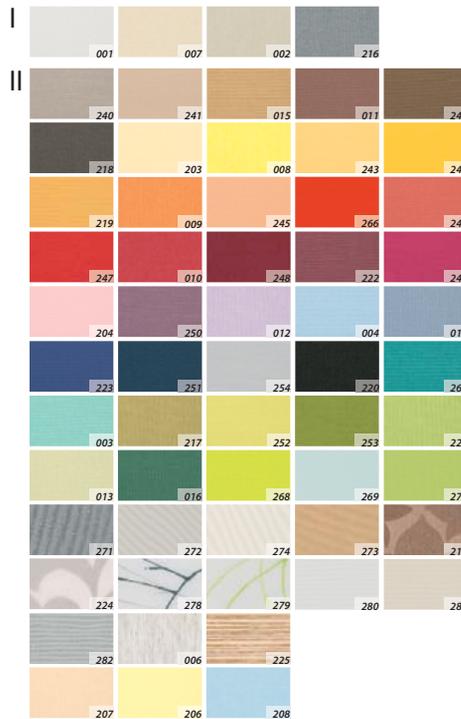
**Venetian blind
AJP**

- 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**

- 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.



Blackout blinds ARF DreamWorks

A child's room is a special place in every home which deserves a particular attention. It should not only be functional, but above all friendly to the youngest. Blackout blinds ensure harmony with the décor of any room and protect it from overheating, while your kids can enjoy comfortable conditions both for playing and learning.

Having children in mind, we have created a unique collection of DreamWorks & FAKRO blinds. Characters from such movies as 'Trolls', 'How to Train Your Dragon', 'Kung Fu Panda' or 'Penguins of Madagascar' will allow your children to invite their favourite heroes into their room.

DreamWorks Dragons © 2019 DreamWorks Animation LLC. All Rights Reserved.
 DreamWorks Kung Fu Panda © 2019 DreamWorks Animation LLC. All Rights Reserved.
 DreamWorks Kung Fu Panda 3 © 2019 DreamWorks Animation LLC. All Rights Reserved.
 DreamWorks Penguins of Madagascar © 2019 DreamWorks Animation LLC. All Rights Reserved.
 DreamWorks Trolls © 2019 DreamWorks Animation LLC. All Rights Reserved.



*POPULAR STOCK LINES. ALL OTHERS SUBJECT TO ORDER.

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

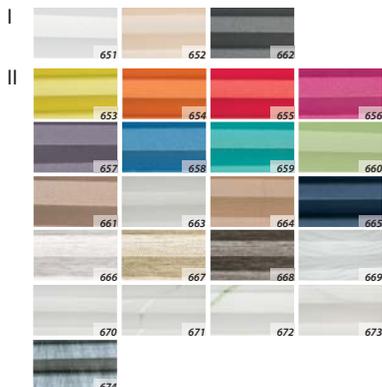
ACCESSORIES

▶ ROOF WINDOW INTERNAL ACCESSORIES



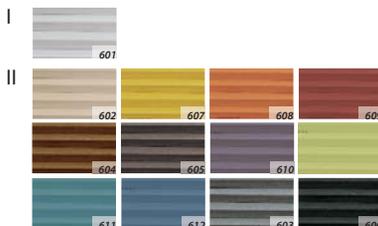
**Pleated blinds
APS**

- 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
£37	£39	£41	£31	£37	£37	£43

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	
VENETIAN BLIND	AJP I	£68	£70	£74	£74	£78	£76	£80	£86	£88	£87	£90	£94	£98	£90	£126
	AJP II	£76	£84	£88	£88	£92	£88	£92	£98	£106	£104	£110	£110	£128	£110	£132
	AJP Z-Wave I	-	-	-	£280	£284	£284	£285	£288	£294	£290	£294	£296	£300	£294	£300
	AJP Z-Wave II	-	-	-	£290	£294	£294	£294	£300	£304	£300	£306	£306	£318	£304	£312
ROLLER BLIND STANDARD	ARS I	£44	£44	£47	£47	£48	£50	£51	£52	£54	£53	£54	£61	£63	£61	£63
	ARS II	£68	£69	£81	£82	£83	£85	£86	£87	£93	£91	£93	£97	£99	£95	£97
DIMMING ROLLER BLINDS	ARP I	£66	£66	£79	£79	£79	£82	£82	£82	-	£90	£90	£97	£102	£97	-
	ARP II	£92	£92	£111	£111	£111	£114	£114	£114	-	£126	£126	£137	£147	£137	-
	ARP Z-Wave I	£207	£210	£212	£212	£218	£218	£222	£226	-	£228	£230	£232	£238	£232	-
	ARP Z-Wave II	£220	£222	£225	£225	£228	£228	£232	£235	-	£235	£244	£244	£248	£244	-
BLACKOUT BLINDS	ARF I	£72	£73	£88	£88	£88	£90	£93	£96	£105	£105	£105	£108	£122	£108	£122
	ARF II	£108	£108	£124	£124	£124	£127	£131	£137	£147	£147	£151	£155	£172	£155	£172
	ARF DreamWorks	£100	£103	£120	£120	£120	£124	£126	£133	£149	£144	£149	£154	£171	£154	-
	ARF Z-Wave I	£210	£212	£215	£215	£220	£220	£224	£228	£232	£230	£232	£235	£242	£234	£244
	ARF Z-Wave II	£216	£218	£222	£222	£225	£225	£228	£232	£242	£232	£238	£242	£245	£242	£250
PLEATED BLINDS	APS I	£66	£70	£74	£74	£78	£76	£80	£87	£95	£90	£95	£101	£110	£105	£114
	APS II	£96	£101	£107	£107	£112	£109	£114	£122	£133	£127	£133	£140	£152	£146	£169
	APF I	£97	£97	£119	£119	£119	£122	£126	£134	£142	£142	£142	£147	£164	£147	£164
	APF II	£128	£128	£152	£152	£152	£158	£163	£170	£188	£182	£188	£192	£216	£192	£216
INSECT SCREEN	AMS 200	£105	£108	£110	£110	£110	£118	£118	£118	£118	£124	£124	£124	£124	£128	£124
	AMS 240	-	-	-	£112	£112	£120	£120	£120	£120	£127	£127	£142	£142	£144	£127

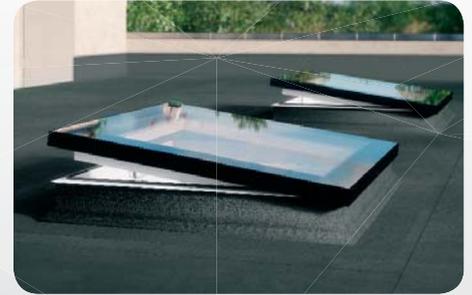
*non-standard sizes can be manufactured as a special order - please contact FAKRO GB for more information

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 and type G) 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.

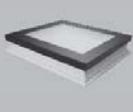
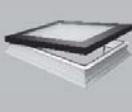
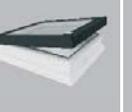
HOW TO SELECT A FLAT ROOF WINDOW

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**.

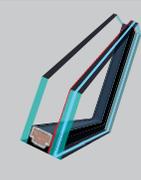
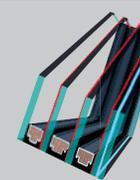
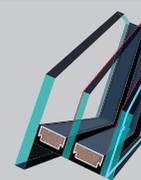
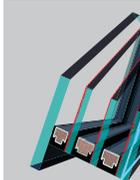
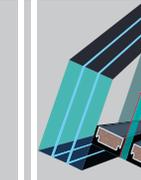
Smoke and heat exhaust ventilation flat roof windows DSF, DSC smoke ventilation flat roof windows are used for extraction of smoke and heat emitted in a building during a fire.

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	DMZ	DEZ	DXW
									
<ul style="list-style-type: none"> Type F flat roof window. Suitable for pitches from 2-15°. The frame constructed of multi-chamber PVC profiles filled with insulation material. Can be mounted on an additional XRD base with a height of 15cm. 			<ul style="list-style-type: none"> Suitable for pitches from 2-15°**. 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. Specially prepared aluminium black profile. The frame constructed of multi-chamber PVC profiles filled with insulation material. Can be mounted on an additional XRD base with a height of 15cm. 			<ul style="list-style-type: none"> Suitable for pitches from 0-15°. 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: <ul style="list-style-type: none"> - D_Z-A, high quality and very good parameters combined with modern aesthetics, - D_Z-B, high thermal insulation performance with the product. 			<ul style="list-style-type: none"> Suitable for pitches from 0-15°. Can be installed completely flush within the roofline. Special design ensures safe walk across the window surface.

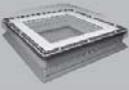
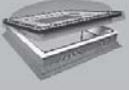
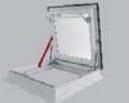
GLAZING UNIT

					
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	DOUBLE
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

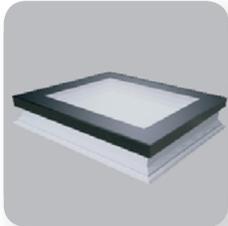
Escape - the **DRL** roof access door is an innovative product providing safe and comfortable access to the flat roof. Its structural durability and range of sizes provide the perfect combination with a loft ladder.

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

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.



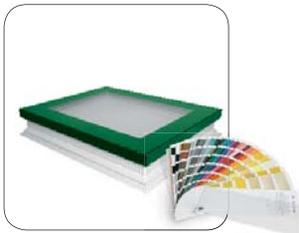
DMF

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



DEF

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



*D_F ColourLine are available in any colour from RAL Classic palette.
PRICES ON APPLICATION*

FLAT ROOF WINDOWS

	60x60	60x90	70x70	80x80	90x90	90x120	100x100	100x150	120x120	140x140	120x220	
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 [m ²]	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	DXF DU6 DU6 - High energy efficient triple glazed unit. U-value of window 0.70	£955	£1032	£1059	£1065	£1194	£1326	£1288	£1589	£1543	£1988	£2556
	DXF DU8 DU8 - Passive quadruple glazed unit. U-value of window 0.64	£1212	£1307	£1335	£1349	£1408	£1654	£1628	£2004	£1931	£3723	£4949
	DXF DU6 Secure* DU6 - High energy efficient triple glazed unit. U-value of window 0.70	-	-	-	-	£1321	£1460	£1432	-	£1703	-	-
MANUALLY OPENING	DMF DU6 DU6 - High energy efficient triple glazed unit. U-value of window 0.70	£1038	£1123	£1159	£1168	£1307	£1434	£1398	£1737	£1675	£2226	£2668
	DMF DU8 DU8 - Passive quadruple glazed unit. U-value of window 0.64	£1299	£1406	£1454	£1462	£1638	£1793	£1745	£2161	£2115	-	-
	DMF DU6 Secure* DU6 - High energy efficient triple glazed unit. U-value of window 0.70	-	-	-	-	£1483	£1634	£1588	-	£1911	-	-
ELECTRICALLY OPENING	DEF DU6 DU6 - High energy efficient triple glazed unit. U-value of window 0.70	£1288	£1359	£1392	£1398	£1545	£1675	£1638	£1931	£1885	£2529	£3218
	DEF DU8 DU8 - Passive quadruple glazed unit. U-value of window 0.64	£1563	£1638	£1692	£1705	£1838	£2024	£1978	£2345	£2281	-	-

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

ACCESSORIES
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▶ 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 an 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.



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, remote control, rain sensor.
- Sash tilts 15cm.

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 [m ²]	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	£595	£638	£677	£671	£771	£888	£838	£1091	£1057	£1434	£1939
MANUALLY OPENING DMG P2 P2 - Anti-burglary double glazed unit. U-value of window 0.92	£722	£806	£828	£859	£954	£1145	£1061	£1570	£1295	£1889	£2386
ELECTRICALLY OPENING DEG P2 P2 - Anti-burglary double glazed unit. U-value of window 0.92	£1010	£1053	£1167	£1086	£1186	£1303	£1253	£1506	£1472	£2408	£3234

ACCESSORIES
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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, complimenting 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

- The D_Z-A version 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
 - DMZ-A – Manually operated
 - DXZ-A – Non-opening.



D_Z-B

- The D_Z-B Version has a high thermal insulation performance and very good parameters at an attractive price.
- 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
 - DMZ-B – Manually operated
 - DXZ-B – Non-opening.

FLAT ROOF WINDOWS

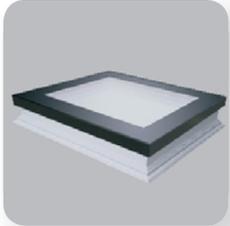
		60x60	60x90	70x70	80x80	90x90	90x120	100x100	120x120
dimensions [cm]		60x60	60x90	70x70	80x80	90x90	90x120	100x100	120x120
Minimum roof opening [cm]		60x60	60x90	70x70	80x80	90x90	90x120	100x100	120x120
Maximum roof opening [cm]		65x65	65x95	75x75	85x85	95x95	95x125	105x105	125x125
Effective glazed area [m ²]		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	DXZ-A P2 P2 - Anti-burglary double glazed unit. U-value of window 0.95	£900	£975	£1000	£1015	£1120	£1240	£1210	£1450
	DXZ-B P2 P2 - Anti-burglary double glazed unit. U-value of window 0.95	£640	£690	£710	£740	£820	£980	£925	£1030
MANUALLY OPENING	DMZ-A P2 P2 - Anti-burglary double glazed unit. U-value of window 0.95	£1015	£1090	£1125	£1130	£1275	£1400	£1350	£1650
	DMZ-B P2 P2 - Anti-burglary double glazed unit. U-value of window 0.95	£780	£870	£900	£930	£1025	£1200	£1150	£1350
ELECTRICALLY OPENING	DEZ-A P2 P2 - Anti-burglary double glazed unit. U-value of window 0.95	£1250	£1325	£1355	£1430	£1500	£1650	£1700	£2000
	DEZ-B P2 P2 - Anti-burglary double glazed unit. U-value of window 0.95	£1100	£1150	£1220	£1250	£1400	£1600	£1550	£1850

ACCESSORIES
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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/m²K.
- 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

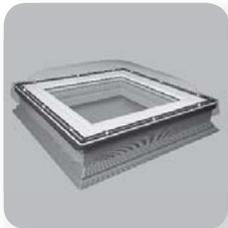
- Non-opening.
- Providing a surface level with the roof and a special non-slip coating to ensure complete safety when walking across it.
- Enhanced load capacity.
- High resistance to break-in attempts thanks to reinforced design.
- Reduced heat loss ($U_w=0.70$ W/m²K).
- Modern design and high quality 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 ²]	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 DXW DW6 U-value of window 0.70	£1519	£1631	£1687	£1711	£1891	£2081	£2025	£2454

DOMED FLAT ROOF WINDOWS

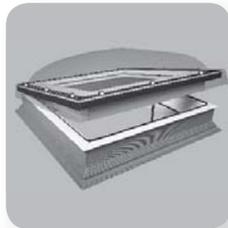


- Provides a large amount of natural light.
- Wide range of sizes.
- Window design allows for the installation of internal and external accessories.
- The domed flat roof window is intended for installation in a roof with a pitch of 0°-15°.
- The flat roof window can be also mounted on an additional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



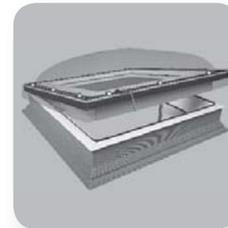
DXC

- 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, remote control, rain sensor.
- Sash tilts 15cm.

FLAT ROOF WINDOWS

	60x60	60x90	70x70	80x80	90x90	90x120	100x100	100x150	120x120	140x140	120x220
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 [m ²]	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											
DXC-C P2 P2 - Anti-burglary double glazed unit. U-value of window 1.2	£474	£508	£556	£535	£615	£708	£668	£866	£836	£1190	£1601
DXC-C P4 Secure* P4 - Anti-burglary double glazed unit. U-value of window 1.2	-	-	-	-	£819	£888	£866	-	£1069	-	-
MANUALLY OPENING											
DMC-C P2 P2 - Anti-burglary double glazed unit. U-value of window 1.2	£659	£729	£752	£755	£864	£964	£935	£1200	£1162	£1525	£2055
DMC-C P4 Secure* P4 - Anti-burglary double glazed unit. U-value of window 1.2	-	-	-	-	£989	£1103	£1073	-	£1328	-	-
ELECTRICALLY OPENING											
DEC-C P2 P2 - Anti-burglary double glazed unit. U-value of window 1.2	£889	£923	£968	£950	£1030	£1123	£1083	£1281	£1251	£1773	£2369
DEC-C U8(VSG) U8 (VSG) - Passiv quadruple glazed unit. U-value of window 0.72**	£1406	£1471	£1515	£1525	£1677	£1838	£1784	£2109	£2055	-	-

* 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
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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** – includes control panel RZN4408K – 1no smoke sensor OSD23 – 1no breakglass RT45.
- **DSC-C2 P2** – includes 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, control units are available in FAKRO product range.

SMOKE VENTILATION WINDOWS

dimensions [cm]	105x105	120x120
Effective geometric area [m ²]	1,00	1,32
Aerodynamic free area of the product [m ²]	0,49	0,61
size symbol	12K	08K
DSF DU6 U-value = 0.79 W/m ² K*	£5850	£6078
dimensions [cm]	100x100	120x120
Effective geometric area [m ²]	0,9	1,32
Aerodynamic free area of the product [m ²]	0,44	0,57
size symbol	07K	08K
DSC-C2 P2 U-value = 1.0 W/m ² K*	£3978	£4386
DSC-C4 P2 U-value = 1.0 W/m ² K*	£5000	£5500

* value for size 120x120

ADDITIONAL ELEMENTS:

ZRD Rain sensor	£81
LP1W Ventilation switch white	£52
LP1B Ventilation switch black	£52



▶ 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



DRC

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°.
- 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°.

FLAT ROOF ACCESS WINDOWS

dimensions [cm]	90x90	90x120	100x100	120x120
Effective glazed area [m ²]	0,6	0,83	0,77	1,16
size symbol	05K	06K	07K	08K
DRF DU6 U-value = 0,74 W/m ² K	£1545	£1711	£1658	£2010
DRC-C P2, DRC-M P2 U-value = 0,93 W/m ² K	£1081	£1143	£1078	£1337

ACCESSORIES
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▶ 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
DRL* + LML 280 LOFT LADDER	£1671	£1728	£1781	£1838	£2160	£2228
DRL* + LML 305 LOFT LADDER	-	-	£1816	£1877	£2232	£2285

*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
EFW Kerb	£270	£276	£301	£305	£307	£310	£325	£370	£420	£375	£381	£384	£398	£412	£445

FLAT ROOF GABLE SYSTEM

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

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 and type F. 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 following flat roof windows: DXF, DMF, DEF, DXC, DMC, DEC.



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 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
XRD	£190	£200	£210	£210	£222	£245	£243	£273	£267	£310	£321
XRD/W	£208	£218	£231	£231	£245	£269	£265	£300	£296	£342	£351
XRD/A	£77	£86	£87	£87	£92	£116	£118	£148	£129	£153	£196

FLAT ROOF WINDOW - ACCESSORIES



£80

ZRD

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



£47

ZBR

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



£45

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.

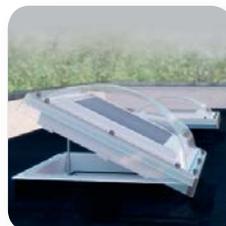
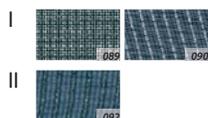


AMZ/F Solar awning blind

- 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/CZ-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
AMZ/F Solar I	£602	£602	£622	£622	£638	£648	£638	£775	£664	£836	£985
AMZ/F Solar II	£638	£638	£660	£660	£680	£690	£680	£830	£706	£890	£1050
AMZ/C Z-Wave I	£312	£320	£325	£330	£346	£634	£356	£670	£680	£706	£782
AMZ/C Z-Wave II	£328	£335	£345	£348	£365	£665	£375	£700	£710	£742	£818

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.

▶ FLAT ROOF WINDOW ACCESSORIES - INTERNAL



**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**

- Opened with wireless Z-Wave system.
- Powered from the mains.

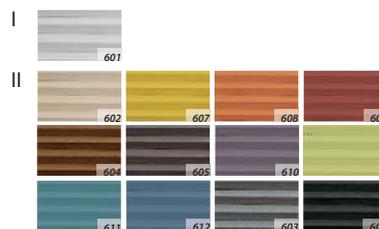
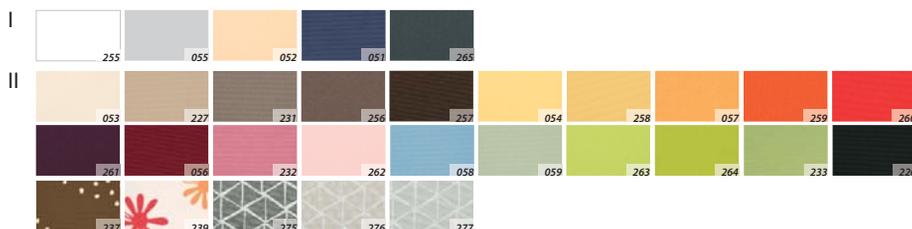
Control:

- Remote control or wall switch.



**Pleated blinds
APF/D**

- Partial reduction of heat in the room.
- Fabric with a honeycomb structure and an internal aluminium coating provides blackout and good thermal performance.
- Aluminium guides are available in two colour versions - lacquered white and anodised silver.
- Top down system - easy operation by means of an upper and lower bar.
- Operated by means of ZSD or ZST control rod.



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
ARF/D I	£73	£73	£79	£83	£89	£97	£97	-	£99	£119	-
ARF/D II	£81	£81	£86	£91	£97	£109	£109	-	£111	£121	-
ARF/D Z-Wave I	£268	£268	£274	£276	£284	£288	£288	£326	£312	-	-
ARF/D Z-Wave II	£275	£275	£280	£284	£290	£296	£296	£332	£318	-	-
APF/D I	£98	£98	£104	£112	£120	£130	£130	£142	£135	£162	£265
APF/D II	£110	£110	£118	£126	£132	£146	£146	£160	£152	£174	£298

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.

LIGHT TUNNELS

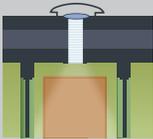


A source of natural light should be available in any living space. Unfortunately, there are interiors in which the use of vertical or roof windows is not feasible. Rooms devoid of daylight are dark and uncomfortable. To ensure illumination in such places, installing a light tunnel will channel natural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

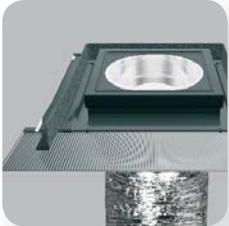
- Place the dome on a south facing roof which is the most illuminated part of the roof and avoid shady places.
- Locate the light transmitting tube in such a way that it travels the shortest possible distance between roof and ceiling.
- Install the light tunnel to ensure the best possible tension (light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

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

▶ LIGHT TUNNELS WITH FLEXIBLE TUBE

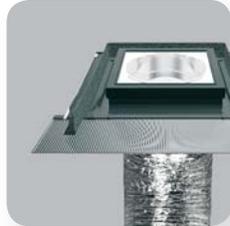


- The light tunnel enables illumination of all rooms in the building, even those which cannot be fitted with roof windows or vertical windows.
- Using light tunnels in rooms devoid of daylight lets natural light inside for better illumination. In other rooms, the light tunnel can constitute an additional 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° and flat roofs.



SF_

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



SF_-L

- Flat - version which illuminates with the space directly below the installation of light tunnel's outer element e.g. attic or loft.
- 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
SFS for flat roof coverings	£280	£388
SFZ for corrugated roof coverings	£280	£388
SFH for high profile roof coverings	£280	£388
SFL for slate roof coverings	£280	£388

LIGHT TUNNELS SF_-L		
light tunnel diameter [cm]	35	55
tube length [cm]	210	210
SFS-L for flat roof coverings	£294	£406
SFZ-L for corrugated roof coverings	£294	£406
SFH-L for high profile roof coverings	£294	£406
SFL-L for slate roof coverings	£294	£406

ACCESSORIES FOR LIGHT TUNNELS		
light tunnel diameter [cm]	35	55
SLM 30 Flexible light transmitting tube extension kit, standard length 30cm	£59	£68
SLM 60 Flexible light transmitting tube extension kit, standard length 60cm	£70	£81
SLM 90 Flexible light transmitting tube extension kit, standard length 90cm	£80	£92
SLM 120 Flexible light transmitting tube extension kit, standard length 120cm	£72	£101
SLM 210 Flexible light transmitting tube extension kit, standard length 210cm	£122	£151
SLO Light Kit	£51	£53



▶ 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_

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



SR_-L

- Flat - version which illuminates with natural light the space directly below the installation of light tunnel's outer element e.g. attic or loft.
- 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]	25	35	55
tube length [cm]	210	210	180*
SRS for flat roof coverings	£290	£375	£575
SRZ for corrugated roof coverings	£290	£375	£575
SRH for high profile roof coverings	£290	£375	£575
SRL for slate roof coverings	£290	£375	£575

LIGHT TUNNELS SR_-L			
light tunnel diameter [cm]	25	35	55
tube length [cm]	210	210	180*
SRS-L for flat roof coverings	£316	£418	£620
SRZ-L for corrugated roof coverings	£316	£418	£620
SRH-L for high profile roof coverings	£316	£418	£620
SRL-L for slate roof coverings	£316	£418	£620

ACCESSORIES FOR LIGHT TUNNELS			
light tunnel diameter [cm]	25	35	55
SRM 61 Rigid light transmitting tube extension element, standard length 61 cm	£69	£86	£113
SRK Elbow	£88	£116	£223
SLO Light Kit	£51	£51	£53



* 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
SFF	£390	£655
light tunnel diameter [cm]	35	55
tube length [cm]	61	61
SRF	£485	£752



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.

LOFT LADDER TYPE	LWK Komfort	LTK Energy	LWF 45	LMF 120	LST
	 U=1.1 W/m ² K	 U=0.68 W/m ² K	 EN 13501-2 EI, 45 U=0.6 W/m ² K	 EN 13501-2 EI, 120 U=0.79 W/m ² K	 U=1.1 W/m ² K
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	7.4 cm	8cm	3 cm
Hatch thickness	3.6 cm	6.6 cm	8 cm	8.2 cm	3.6 cm
Maximum loading	160 kg	160 kg	160 kg	200 kg	200 kg



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 EI₄₅ EN 13501-2), as well as exceptional airtightness and thermal insulation.

DOOR TYPE	DWK U=1.1 W/m ² K	DWT U=0.6 W/m ² K 4 CLASS EN12207	DWF U=0.64 W/m ² K 4 CLASS EN12207 EN 13501-2 EI, 45
			
	INSULATED	HIGHLY ENERGY EFFICIENT	FIRE-RESISTANT
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	



WINDOW SIZE GUIDE

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

HEIGHT in cm	WIDTH in cm					
	55	66	78	94	114	134
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	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	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 FSP	
160			FYP-V FTP-V PTP-V PTP FPP-V	FYP-V FTP-V PTP-V** PTP**		
180			FYP-V	FYP-V		
186			FDY-V	FDY-V		
206			FDY-V FYP-V	FDY-V FYP-V		
235			FDY-V ***	FDY-V ***		
255			FDY-V ***	FDY-V *** FGH-V P2		

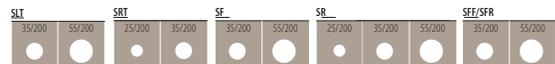
HEIGHT in cm	WIDTH in cm			WIDTH in cm	
	78	94	114	46	54
60	BDL BDR BXP	BXP	BXP	WGT	
75	BDL BDR BXP	BDL BDR BXP		WGI/C	
95	BDL BDR	BDL BDR	BDL BDR	WGT WGI	
98					WLI/C

Flat Roof Windows

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



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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