

ROOF WINDOWS PRODUCT SELECTOR AND PRICE LIST APRIL **2017**

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 comment.

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. BBA and FSC® certified products together with warranties of 10 years for windows and 20 years for glazing give 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.

Ample natural light

The design of FAKRO roof windows provides appropriate illumination of the room within the loft space. Specially shaped profiles of the frame and sash as well as an air inlet location in the upper part of the frame allows for the influx of high quantities of natural light.

Timber quality

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. Our double vacuum process using water-borne preservatives provides lasting dimensional stability and all windows are finished with two coats of environmentally friendly lacquer. Compare this with another leading manufacturer which states - "The timber has received basic treatment and a finished coating at the factory. It must receive further treatment at least every four years and whenever required. Windows exposed to strong heat, strong sunlight and/or high levels of humidity (e.g. in kitchens or bathrooms) must however receive treatment at least every two years". We therefore actively encourage customers to compare our window finishing with that of other manufacturers.

Windows for bathrooms, wetrooms and kitchens

FAKRO offers two types of roof window 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. So, whether you want to match existing windows and doors or have a smooth timber finish in white, FAKRO has the perfect solution. FAKRO PVC veneers also achieve the highest level of measurable performance - Class A - EN12608.



3

Automatic air ventilation in all windows

Many manufacturers use a standard manually operated vent which is inefficient, causing unnecessary heat loss. 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.

Exceptional security

FAKRO's TopSafe® system provides peace of mind that our roof windows offer exceptional burglary resistance. In contrast to products which break simply by applying foot pressure, TopSafe provides additional hinge and lock reinforcement to prevent the sash from being forced. A European Standard (EN13049) now means you can compare roof window security and all FAKRO products achieve a minimum of Class 3. FAKRO also manufactures a standard centre pivot window, the FTP-V P2 Secure, which has security glazing.



7

8

The highest level of energy saving performance

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, with a single glazing unit area a U-value of 0.58 W/m²K, leads the market. Our standard FTP-V centre pivot windows also offer a level of performance which competing windows invariably fail to match.

Warm glazing spacers

Many roof windows use metallic spacers to separate panes and these can encourage condensation to form by forming a cold 'bridge' between them. By contrast, FAKRO uses only warm spacers in order to ensure that this otherwise common problem does not affect our products.

Ease of installation

Our easy to use "bracket fix" installation system enables windows to be fitted either to rafters or battens. Windows can also be fitted onto sarking.



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.



CLifetime glazing unit hail resistance warranty





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 or pine PVC and white PU coated roof windows from stock in just 3 days.

PLEASE NOTE: THE STANDARD COLOUR FOR THE EXTERNAL PROFILES OF FAKRO ROOF WINDOWS IS UMBER GREY/BROWN RAL 7022. OTHER COLOURS ARE PRICED ON REQUEST.

4





solution for airtight designs.

roofing accessories to be copied and pasted.

Certificates

The FTT U8 offers an amazing U-value of 0.58 W/m²K and provides the ideal



N55Plus

BBA BRITISH BBA BRATS OF CERTIFICATE NO 02/3944

FIRST ON THE UK MARKET

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 pivot 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.

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.

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



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

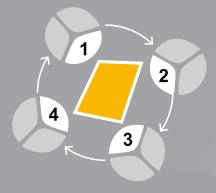
CE marking provides a passport that enables a construction product, irrespective of its origin, to be legally placed on the market of all EU member states. Unlike some manufacturers, FAKRO declares full details of performance for all points which make up a CE mark, yet more evidence that our products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

5

NEW DIMENSION OF INNOVATION Pro

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

1

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



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

greater wood durability THANKS TO WATER DRAINAGE CHANNELS



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



3

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. **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 PU-coated pine and PVC is available.

STANDARD ROOF WINDOWS

Top hung and pivot dual function roof

windows provides 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 even taller people to walk up to the open window. 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 2.35 metres.

| | | | | | | | | | ROOF WINDOWS |
|---------------------|----------------------------|----------------------------|----------------------------|----------------------------|-----------------------|----------------------------|--------------------------------|------------------------|------------------------|
| type | | | | | CENTRE PIVOT | Γ | | | |
| | | | | | 1 | | | | |
| symbol: | FTP-V U3 | FTP-V P2 | FTU-V P2 FTW-V P2 | PTP-V P2 | PTP-V Z- WAVE | FTP-V P2 Z-Wave | FTU-V P2 FTW-V P2 Z-Wave | FTT U6 | FTT U8 Thermo |
| view | đ | 4 | 4 | 8 | | 4 | 4 | | |
| material | wood | wood | wood (white) | PVC | PVC | wood | wood | wood | wood |
| airinlet | V40P | V40P | V40P | V35 | V35 | V40P | V40P | non-vented | non-vented |
| air inlet air flow | up to 49 m ³ /h | up to 49 m ³ /h | up to 49 m ³ /h | up to 41 m ³ /h | _ | up to 49 m ³ /h | up to 49 m ³ /h | _ | _ |
| glazing | double | double | double | double | double | double | double | triple | qadruple |
| Ug (wg EN 673) | 1.0 W/m ² K | 1.0W/m ² K | 1.0W/m ² K | 1.0W/m ² K | 1.0W/m ² K | 1.0W/m ² K | 1.0 W/m ² K | 0.5 W/m ² K | 0.3 W/m ² K |
| Uw | 1.2 W/m ² K | 1.2W/m ² K | 1.2W/m ² K | 1.3W/m ² K | 1.3W/m ² K | 1.2W/m ² K | 1.2 W/m ² K | 0.8 W/m ² K | 0.58W/m ² K |
| acoustic insulation | 32dB | 35dB | 33dB | 35 dB | 33 dB | 32dB | 32dB | 38dB | 36dB |
| seals | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| installation pitch | 15-90° | 15-90° | 15-90° | 15-90° | 15-90° | 15-90° | 15-90° | 15-70° | 15-70° |
| GL | AZING UN | IT | | | | | | | |

| GLAZING UNI I | | | | | |
|----------------------------|---------------|----------------------|-------------|----------------------------|-----------------|
| GLAZING UNIT | U3 | P2 | P5 | U6 | U8 |
| TECHNICAL SPECIFICATION | ENERGY SAVING | ANTI BURGLARY | SAFE | HIGHLY ENERGY EFFICIENT | PASSIVE GLAZING |
| GLAZING | DOUBLE | DOUBLE | TRIPLE | TRIPLE | QUADRUPLE |
| INNER LAMINATED GLASS | | (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.

| | TOP | HUNG AND PIVOT WIND | OWS | HIGH | PIVOT | BALCONY | L-SHAPED | SIDE HUNG |
|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|------------------------|
| | | | | | | | | |
| FTP-V P2 Secure | FPP-V P2 preSelect | FPU-V P2 preSelect | PPP-V P2 preSelect | FYP-V P2 proSky | FDY-V P2 Duet proSky | FGH-V P2 Galeria | BDL P2 BDR P2 BVP P2 | FWR P2 FWL P2 |
| 1 | 1 | 1 | 1 | A | 1 | 7 | | |
| wood | wood | wood (white) | PVC | wood | wood | wood | wood | wood |
| V40P | V40P | V40P | V35 | V40P | V40P | V40P | non-vented | non-vented |
| up to 49 m ³ /h | up to 49 m ³ /h | up to 49 m ³ /h | up to 41 m ³ /h | up to 49 m ³ /h | up to 28 m ³ /h | up to 28 m ³ /h | _ | — |
| double | double |
| 1.0 W/m²K | 1.0 W/m ² K | 1.0 W/m²K | 1.0 W/m²K | 1.0 W/m²K | 1.1 W/m²K | 1.1 W/m²K | 1.1 W/m²K | 1.1 W/m ² K |
| 1.2 W/m²K | 1.2 W/m ² K | 1.2 W/m²K | 1.3 W/m²K | 1.3 W/m²K | 1.3 W/m²K | 1.5 W/m²K | 1.3 W/m ² K | 1.4W/m ² K |
| 35 dB | 35dB | 35dB | 33dB | 35 dB | 35 dB | 35dB | 37 dB | NPD |
| 4 | 4 | 4 | 4 | 4 | 4 | 4 | 2 | 2 |
| 15-90° | 15-55° (85°) | 15-55° (85°) | 15-55° (85°) | 20-65° | 25-65° | 35-55° | roofwindow15-55° | 15-55° |

| A NON-VENTED OPTION CAN ALSO BE ORDERED FOR ALL WINDOWS |
|---|
| |

| R1 | R3 | P2 | GG | 02 |
|----------------|----------------|---------------|---------------|---------|
| SOUND REDUCING | SOUND REDUCING | ANTI-BURGLARY | SOLAR CONTROL | OBSCURE |
| DOUBLE | TRIPLE | DOUBLE | DOUBLE | DOUBLE |
| (Class P2A) | (Class P2A) | (Class P2A) | \checkmark | |

10 TIPS 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.



HOW MUCH **DAYLIGHT** DO YOU NEED?

- The higher from the floor a roof window is fitted will provide optimal illumination of the room.
- The German standard DIN 5034-1, 4.2.2a states "the upper edge of the window (or windows) transparent surface shall be positioned at least 220cm from the floor level".

3

WHICH GLAZING UNITTO 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.



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.

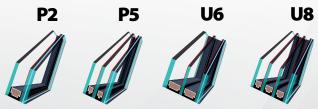


CORRECT CHOICE OF FLASHING

- Enables roof windows to be installed with any type of roof covering
 Can be fitted at 3 key depths:
- 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 sit low within the roof line.







 $Ug = 1.0 W/m^2 K$ $Ug = 0.5 w/m^2 k$

Ug = 0.5 W/m²K Ug =

 $Ug = 0.3 W/m^{2}K$

 $15^{\circ} \leftrightarrow 90^{\circ}$



6

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.



WILL YOUR ROOF WINDOW BE FITTED IN ROOMS WITH **ELEVATED** HUMIDITY?

- Wooden windows can look very attractive but there is a degree of maintenance required to retain their ultimate appearance, one solution is to specify windows that have a double coat of white polyurethane.
- PVC profile windows with steel reinforcement are a practical solution for bathrooms and places where regular maintenance is difficult. PVC finishes include White, Golden Oak and Pine.



MANUAL OR ELECTRIC CONTROL?

- Wireless technology is available to operate your roof windows. • Z-Wave is a wireless protocol for communication between household appliances. It combines into a single network
- electric devices such as: lighting, thermostats, alarms, computers, telephones, air conditioning, electric windows and blinds.





ENHANCED ANTI-BURGLARY **RESISTANCE**?

- Easily accessible roof windows, especially when the garage is adjacent to the house, should be protected from burglary.
- You should always fit reinforced windows with toughened external glass in these situations.
- The FAKRO TopSafe system provides the ultimate in safety and helps prevent break-ins.



10 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.









High quality close-grain ingrigating close grain
vacuum
impregnated pine guaran-teed to be knot-free
Suitable for any room



High quality close-grain vacuum
impregnated pine guaranteed to be knot-free, finished with white acrylic paint. Range of RAL colours to special order.
Suitable for any room



CENTRE PIVOT WINDOW - POPULAR OPTIONS IN WHITE & NATURAL PINE

| | windows external dimensions [cm] | 55x78 | 55x98 | 55x118 | 66x98 | 66x118 | 78x98 | 78x118 | 78x140 | 78x160 | 94x118 | 94x140 | 114x118 | 114x140 | 134x98 | 94x160 |
|---------------------------------------|---|-------|-------|--------|-------|--------|-------|--------|--------|--------|--------|--------|---------|---------|--------|--------|
| | effective glazing area [m²] | 0.21 | 0.29 | 0.37 | 0.38 | 0.47 | 0.47 | 0.59 | 0.72 | 0.82 | 0.75 | 0.92 | 0.95 | 1.16 | 0.92 | 0.75 |
| | | 01 | 02 | 16 | 03 | 04 | 05 | 06 | 07 | 13 | 08 | 09 | 10 | 11 | 12 | 80 |
| WHITE | | | | | | | | | | | | | | | | |
| FTW-V P2 (White Acrylic) | P2–Safety double glazed unit. Toughened outerpane. Laminated innerpane. U value of window 1.2 | £228 | £241 | £252 | £255 | £280 | £262 | £296 | £328 | £395 | £358 | £383 | £393 | £415 | £377 | £403 |
| FTU-V P2 (White PU Coated Pine) | P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.2 | £274 | £289 | £302 | £307 | £336 | £314 | £355 | £393 | £465 | £410 | £459 | £472 | £495 | £453 | £484 |
| NATURAL | PINE | | | | | | | | | | | | | | | |
| FTP-V U3 | U3 – Energy saving double glazed unit. Toughened outer pane. U value of window 1.2 | £216 | £228 | £238 | £240 | £266 | £248 | £280 | £310 | £372 | £335 | £362 | £372 | £390 | £358 | £382 |
| FTP-V P2 | P2 – Safety double glazed unit. Toughened outer pane. Laminated inner pane. Uvalue of window 1.2 | £219 | £231 | £241 | £245 | £269 | £252 | £284 | £314 | £380 | £345 | £367 | £377 | £400 | £362 | £387 |
| OTHER GL | AZING OPTIONS | | | | | | | | | | | | | | | |
| FTU-V O2 (White PU Coated Pine) | 02 – Obscure double glazed unit. U value of window 1.2 | £314 | £329 | £342 | £357 | £376 | £354 | £395 | £433 | £520 | £480 | £499 | £512 | £540 | £493 | £524 |
| FTP-V O2 | 02 – Obscure double glazed unit. U value of window 1.2 | £280 | £294 | £308 | £310 | £333 | £324 | £361 | £393 | £477 | £431 | £453 | £464 | £506 | £460 | £510 |
| FTP R1 | R1 – Sound reducing glazed unit, Rw 39 dB | £282 | £300 | £320 | £325 | £352 | £334 | £366 | £420 | £490 | £435 | £476 | £486 | £500 | £472 | POA |
| FTU-V P5 (white PU coated) | P5 – Safety triple glazed unit. Toughened outer pane. Laminated inner pane. U value of window 0.97 | £424 | £439 | £452 | £462 | £486 | £464 | £505 | £543 | N/A | £590 | £609 | £622 | £710 | £603 | POA |

ALL WINDOWS AVAILABLE VENTED OR NON-VENTED (P RICE ON APPLICATION) PLEASE CHOOSE THE FLASHING KIT TO MATCH YOUR ROOF COVERING



pages 64-66



Head ventilator - can be controlled without the need to operate the window opening handle.



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

V40P automatic air vent to prevent unnecessary heat loss

Topsafe[®] system of burglary protection as standard

Suitable for retro-fitting of electronic operation

Suitable for pitches from 15-90°

Available in conservation style

01283 554755 ALL PRICES EXCLUDE VAT www.fakro.co.uk

13







High quality, close grain
 vacuum impregnated pine
 with a triple coating of white
 polyurethane for a smooth,
 wipe clean finish
 Ideal for bathrooms, wetrooms,
 kitchens and environments
 with increased humidity



FTW-V

High quality close-grain vacuum
 - impregnated pine guaranteed to be knot-free, finished with white acrylic paint. Range of RAL colours to special order.
 Suitable for any room



CENTRE PIVOT WINDOW – WHITE ACRYLIC/WHITE PU-COATED PINE

| | windows external dimensions [cm] | 55x78 | 55x98 | 55x118 | 66x98 | 66x118 | 78x98 | 78x118 | 78x140 | 78x160 | 94x118 | 94x140 | 114x118 | 114x140 | 134x98 | 94x160 |
|--------------------------------|--|-------|-------|--------|-------|--------|-------|--------|--------|--------|--------|--------|---------|---------|--------|--------|
| | effective glazing area [m²] | 0.21 | 0.29 | 0.37 | 0.38 | 0.47 | 0.47 | 0.59 | 0.72 | 0.82 | 0.75 | 0.92 | 0.95 | 1.16 | 0.92 | 0.75 |
| | | 01 | 02 | 16 | 03 | 04 | 05 | 06 | 07 | 13 | 08 | 09 | 10 | 11 | 12 | 80 |
| FTU-V P2 Rw 35 dB | P2 – Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.2 | £274 | £289 | £302 | £307 | £336 | £314 | £355 | £393 | £465 | £410 | £459 | £472 | £495 | £453 | £484 |
| FTU-V P5 Rw 35 dB | P5 – Safety triple glazed unit. Toughened outer pane. Laminated inner pane. U value of window 0.97 | £424 | £439 | £452 | £462 | £486 | £464 | £505 | £543 | N/A | £590 | £609 | £622 | £710 | £603 | POA |
| FTU-V 02 | 02 - Obscure double glazed unit. U value of window 1.2 | £314 | £329 | £342 | £357 | £376 | £354 | £395 | £433 | £520 | £480 | £499 | £512 | £540 | £493 | £524 |
| FTU-V P2 Secure Rw 35 dB | P2 Secure Anti- burglary double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.2 | £404 | £418 | £472 | £472 | £492 | £478 | £512 | £546 | £630 | £576 | £594 | £645 | £680 | £630 | £664 |
| FTW-V P2 Rw 35 dB | P2 Secure Anti- burglary double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.2 | £228 | £241 | £252 | £255 | £280 | £262 | £296 | £328 | £395 | £358 | £383 | £393 | £415 | £377 | £403 |
| FTW-V P5 | P5 - Safety triple glazed unit. Toughened outer pane. Laminated inner pane. U value of window 0.97 | £378 | £391 | £402 | £412 | £430 | £412 | £446 | £478 | N/A | £508 | £533 | £543 | £595 | £527 | POA |

ALL WINDOWS AVAILABLE VENTED OR NON-VENTED (PRICE ON APPLICATION). PLEASE CHOOSE THE FLASHING KIT TO MATCH YOUR ROOF COVERING









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

V40P automatic air vent to prevent unnecessary heat loss

Topsafe[®] system of burglary protection as standard

- Suitable for retro-fitting of electronic operation
- Suitable for pitches from 15-90°
- Available in conservation style







■V35 air inlet

 Suitable for every room including bathrooms and wet rooms



Non Vented

 Suitable for every room including bathrooms and wet rooms



| U FNIKF PI | VOT WINDO | MV = PV |
|------------|------------------|---------|
| | | |

| | windows external dimensions [cm] | 55x78 | 55x98 | 55x118 | 66x98 | 66x118 | 78x98 | 78x118 | 78x140 | 78x160 | 94x118 | 94x140 | 114x118 | 114x140 | 134x98 | 94x160 |
|----------------------|---|-------|-------|--------|-------|--------|-------|--------|--------|--------|--------|--------|---------|---------|--------|--------|
| | effective glazing area [m²] | 0.21 | 0.29 | 0.37 | 0.38 | 0.47 | 0.47 | 0.59 | 0.72 | 0.82 | 0.75 | 0.92 | 0.95 | 1.16 | 0.92 | 0.75 |
| | | 01 | 02 | 16 | 03 | 04 | 05 | 06 | 07 | 13 | 08 | 09 | 10 | 11 | 12 | 80 |
| PTP-V P2 Rw 33 dB | P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.3 | £228 | £241 | £252 | £255 | £280 | £262 | £296 | £328 | £395 | £358 | £383 | £393 | £415 | £377 | £402 |
| PTP P2 Rw 36 dB | P2 – Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.3 | £228 | £241 | £252 | £255 | £280 | £262 | £296 | £328 | £395 | £358 | £383 | £393 | £415 | £377 | £403 |
| PTP O2 Rw 36 dB | O2 – Obscure double glazed unit. U value of window 1.3 | £282 | £300 | £305 | £315 | £326 | £326 | £358 | £410 | £470 | £415 | £435 | £465 | £500 | £465 | £555 |
| PTP-V O2 Rw 33 dB | O2 – Obscure double glazed unit. U value of window 1.3 | £282 | £300 | £305 | £315 | £326 | £326 | £358 | £410 | £470 | £415 | £435 | £465 | £500 | £465 | £555 |
| PTP-V P5 Rw 36 dB | P5 – Safety triple glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.1 | £484 | £520 | £539 | £539 | £580 | £580 | £625 | POA | POA | POA | | - | - | | |

ALL WINDOWS AVAILABLE VENTED OR NON-VENTED (PRICE ON APPLICATION) PLEASE CHOOSE THE FLASHING KIT TO MATCH YOUR ROOF COVERING











Traditional centre pivot operation. Ideal for bathrooms, wetrooms, kitchens and environments with increased humidity

Windows turn through 180° to clean outer pane from within the room

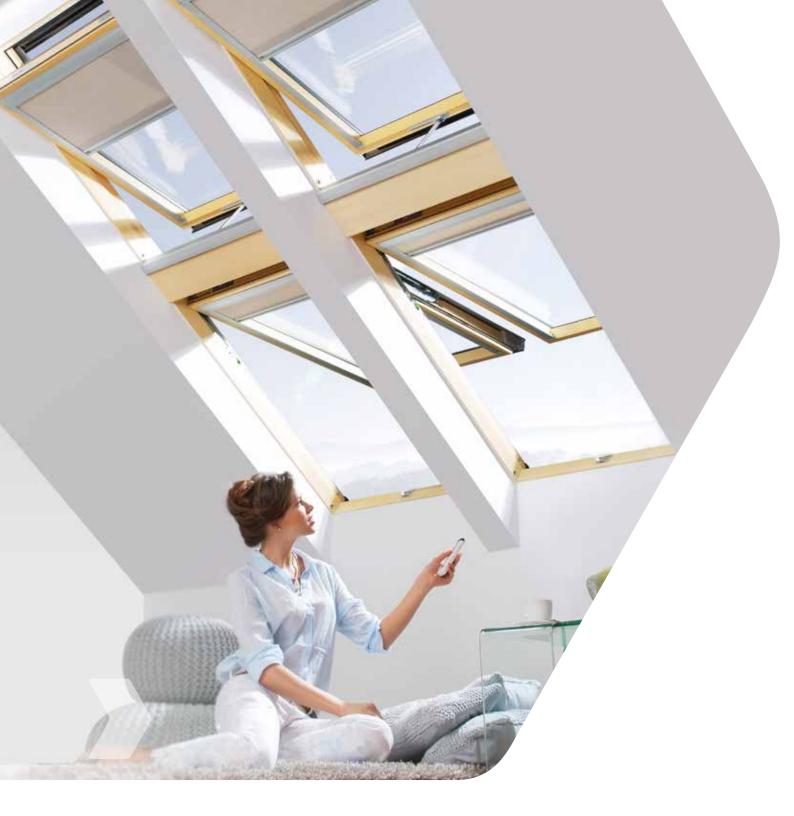
Operating handle in the base of the sash for ease of use

Topsafe[®] system of burglary protection as standard

PVC profile with steel reinforcement for a smooth, wipe clean finish. Available in White, Golden Oak or Natural Pine veneer finishes Suitable for pitches from 15° - 90°

Available in conservation style

17



Electric Z-Wave Controlled Windows



FTP-V Z-Wave

 High quality, close-grain vacuum impregnated pine in a natural finish



FTU-V Z-Wave

High quality, close-grain vacuum impregnated pine with a triple-coating of white polyurethane for a smooth, wipe-clean finish



FTW-V Z-Wave

High quality close-grain
 vacuum - impregnated pine
 guaranteed to be knot-free,
 finished with white acrylic
 paint. Range of RAL colours to
 special order.
 Suitable for any room



| 1 |
|---|
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| |

WINDOWS WITH ELECTRIC Z WAVE CONTROL NATURAL PINE/WHITE PU-COATED PINE/PVC

| | windows external dimensions [cm] | 55x78 | 55x98 | 55x118 | 66x98 | 66x118 | 78x98 | 78x118 | 78x140 | 78x160 | 94x118 | 94x140 | 114x118 | 114x140 | 134x98 | 94x160 |
|--------------------|--|-------|-------|--------|-------|--------|-------|--------|--------|--------|--------|--------|---------|---------|--------|--------|
| | | | - | | - | | - | | | | | | | | | 4 |
| | effective | 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 |
| | glazing area [m²] | | | | | | | | | | | | | | | 0.75 |
| | | 01 | 02 | 16 | 03 | 04 | 05 | 06 | 07 | 13 | 08 | 09 | 10 | 11 | 12 | 80 |
| | P2 – Safety double glazed | | | | | | | | | | | | | | | |
| FTP-V P2 | unit. Toughened outer pane. | £519 | £531 | £541 | £554 | £569 | £552 | £584 | £614 | £720 | £650 | £667 | £677 | £730 | £662 | £687 |
| Z-Wave | Laminated inner pane. U value of window 1.2 | | | | | | | | | | | | | | | |
| FTW-V | P2 – Safety double glazed | | | | | | | | | | | | | | | |
| P2 | unit. Toughened outer pane. Laminated inner pane. | £528 | £541 | £552 | £564 | £580 | £562 | £594 | £628 | £735 | £664 | £683 | £693 | £745 | £677 | £703 |
| Z-Wave | Uvalue of window 1.2 | | | | | | | | | | | | | | | |
| FTU-V P2 | P2 – Safety double glazed unit. Toughened outer pane. | | | | | | | | | | | | | | | |
| Z-Wave | Laminated inner pane. | £574 | £589 | £602 | £609 | £636 | £614 | £655 | £693 | £810 | £750 | £759 | £772 | £810 | £753 | £784 |
| | U value of window 1.2 | | | | | | | | | | | | | | | |
| PTP-V P2 | P2 – Safety double glazed unit. Toughened outer pane. | POA | POA | POA | POA | POA | POA | POA | POA | POA | POA | POA | POA | POA | POA | POA |
| Z-Wave | Laminated inner pane.' U value of window 1.3 | rva | PUA | rva | PVA | FUA | PVA | FVA | FVA | PUA | FUA | PVA | FVA | PVA | FUA | PVA |
| | P5 – Safety triple glazed | | | | | | | | | | | | | | | |
| FTP-V P5 | unit. Toughened outer | | | | | | | | | | | | | | | |
| Z-Wave | pane. Laminated inner pane. | £670 | £682 | £692 | £700 | £720 | £702 | £734 | £766 | POA | £800 | POA | POA | POA | POA | - |
| | U value of window 0.97 | | | | | | | | | | | | | | | |
| | P5 – Safety triple glazed | | | | | | | | | | | | | | | |
| FTW-V P5 Z-Wave | unit. Toughened outer pane. Laminated inner | £678 | £691 | £702 | £710 | £730 | £712 | £746 | £778 | POA | £812 | POA | POA | POA | POA | - |
| Z-wave | pane. U value of window 0.97 | | | | | | | | | | | | | | | |
| | P5 – Safety triple glazed | | | | | | | | | | | | | | | |
| FTU-V P5 | unit. Toughen'ed outer | (724 | (724 | (75) | (75) | (704 | | (007 | (0.17) | 001 | (000 | 001 | 001 | 001 | 004 | |
| Z-Wave | pane. Laminated inner pane. | £724 | £739 | £752 | £756 | £786 | £764 | £805 | £843 | POA | £890 | POA | POA | poa | POA | - |
| | U value of window 0.97 | | | | | | | | | | | | | | | |
| | P5 – Safety triple glazed unit. Toughened outer | | | | | | | | | | | | | | | |
| PTP-V P5 Z-Wave | pane. Laminated inner | POA | POA | POA | POA | POA | POA | POA | POA | POA | POA | - | - | - | - | - |
| - 11470 | pane. U value of window 1.1 | | | | | | | | | | | | | | | |
| | 5 10/00 01 11110011 111 | | | | | | | | | | | | | | | |

ALL WINDOWS AVAILABLE VENTED OR NON-VENTED (PRICE ON APPLICATION) PLEASE CHOOSE THE FLASHING KIT TO MATCH YOUR ROOF COVERING



Traditional centre pivot operation complete with Z-Wave system. Z-Wave uses low power radio waves to operate a range of devices including lighting, air conditioning and roof windows. Electrical accessories such as blackout, roller and Venetian blinds as well as external roller shutters can be operated with ease.

Windows turn through 180° to clean outer pane from within the room

- V40P automatic air vent to prevent
- unnecessary heat loss
- Topsafe[®] system of burglary protection as standard
- Suitable for pitches from 15° 90°
- Available in conservation style





ACCESSORIES pages 64-66



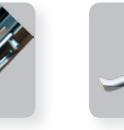
FTP-V P2 Secure FTW-V P2 Secure FTU-V P2 Secure



Laminated and anti-burglary interior glass Class P2A

Protection against window impact, levering and glazing removal

Handle with lock



The FTP-V P2 Secure window is compliant with European anti-burglary 2 class RC 2 N as per EN 1627.



ANTI-BURGLARY CENTRE PIVOT WINDOW - SECURE IN WHITE & PINE

| | windows external dimensions [cm] | 55x78 | 55x98 | 55x118 | 66x98 | 66x118 | 78x98 | 78x118 | 78x140 | 78x160 | 94x118 | 94x140 | 114x118 | 114x140 | 134x98 | 94x160 |
|--------------------------------------|---|-------|-------|--------|-------|--------|-------|--------|--------|--------|--------|--------|---------|---------|--------|--------|
| | effective glazing area [m²] | 0.21 | 0.29 | 0.37 | 0.38 | 0.47 | 0.47 | 0.59 | 0.72 | 0.82 | 0.75 | 0.92 | 0.95 | 1.16 | 0.92 | 0.75 |
| | | 01 | 02 | 16 | 03 | 04 | 05 | 06 | 07 | 13 | 08 | 09 | 10 | 11 | 12 | 80 |
| FTP-V P2 Secure (Natural Pine) | P2 – Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.2 | £352 | £364 | £383 | £390 | £404 | £388 | £420 | £448 | £550 | £480 | £512 | £522 | £560 | £506 | £536 |
| FTW-V P2 Secure | P2 – Safety double glazed unit. Toughened outer pane. Laminated | | | | | | | | | | | | | | | |
| (White Acrylic) | inner pane. U value of window 1.2 | £352 | £364 | £383 | £390 | £404 | £388 | £420 | £448 | £550 | £480 | £512 | £522 | £560 | £506 | £536 |

ALL WINDOWS AVAILABLE VENTED OR NON-VENTED (PRICE ON APPLICATION). FTP-V P2 IS CERTIFIED TO EN 1627 CLASS 2. PLEASE CHOOSE THE FLASHING KIT TO MATCH YOUR ROOF COVERING

FLASHINGS QUICK REF page 75 IN DETAIL pages 61-63







Traditional centre pivot operation.

Combination of topSafe hinge and lock reinforcement, Class P2A laminated anti-burglary glazing, system preventing glass removal and safety lock

Windows turn through 180° to clean outer pane from within the room

Operating handle in the base of the sash for ease of use

V40P automatic air vent to prevent unnecessary heat loss

Topsafe[®] system of burglary protection as standard



ligh quality close-grain vacuum impregnated pine guaranteed to be knot-free

Suitable for pitches from 15° - 90°

Available in conservation style



FTT U8 thermo FTT U6 FTT R3



FTT U8 Thermo

Quadruple glazed and fivefold seal airtight construction

Supplied complete with thermal flashing and XDK insulation kit



FTT U6 Triple glazed and fivefold seals



FTT R3 Triple glazed and fivefold seals

■ Sound reduction glazing unit (Rw =42dB)



HIGHLY ENERGY - EFFICIENT ROOF WINDOWS

| | windows external dimensions [cm] effective glazing area [m ²] | 55x78 0.21 | 55x98 0.29 | 55x118 0.37 | 66x98 0.38 | 66x118 | 78x98 0.47 | 78x118 | 78x140 | 78x160 | 94x118 | 94x140 | 114x118 | 114x140 | 134x98 0.92 | 94x160 |
|--------------------|--|---------------|---------------|----------------|---------------|--------|---------------|--------|--------|--------|--------|--------|---------|---------|----------------|--------|
| | 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* | N/A | £865 | £908 | £920 | £965 | £972 | £1080 | £1 195 | £1390 | £1245 | £1282 | £1 295 | £1455 | £1 320 | £1575 |
| FTT U6 | U6 – High energy efficient triple glazed unit. U value of window 0.80 | N/A | £504 | £526 | £526 | £558 | £558 | £632 | £698 | £811 | £730 | £751 | £755 | £852 | £772 | £922 |
| FTT R3 Rw 42 dB | R3 – Sound reducing triple glazed unit. U value of window 0.81 | N/A | £540 | £567 | £567 | £602 | £599 | £678 | £753 | £875 | £790 | £810 | £816 | £922 | £832 | £996 |
| FTT/U U8 Thermo | U8 – Passive quadruple glazed unit. U value of win dow 0.58* | N/A | £935 | £987 | £992 | £1047 | £1052 | £1 172 | £1 296 | £1 500 | £1 352 | £1396 | £1410 | £1575 | £1430 | £1704 |
| FTT/U U6 | U6 – High energy efficient triple glazed unit. U value of window 0.80 | N/A | £553 | £578 | £578 | £612 | £612 | £694 | £766 | £891 | £802 | £825 | £830 | £938 | £848 | £1014 |
| FTT/U R3 | R3 – Sound reducing triple glazed unit. U value of window 0.81 | N/A | £595 | £623 | £623 | £662 | £658 | £746 | £828 | £962 | £868 | £892 | £898 | £1 014 | £915 | £1096 |
| FTT/W U8 Thermo | U8 – Passive quadruple glazed unit. U value of window 0.58* | N/A | £900 | £945 | £956 | £1004 | £1 010 | £1 124 | £1242 | £1446 | £1295 | £1334 | £1346 | £1 514 | £1372 | £1638 |
| FTT/W U6 | U6 – High energy efficient triple glazed unit. U value of window 0.80 | N/A | £504 | £526 | £526 | £558 | £558 | £632 | £698 | £811 | £730 | £751 | £755 | £852 | £772 | £922 |
| FTT/W R3 | R3 – Sound reducing triple glazed unit. U value of window 0.81 | N/A | £540 | £567 | £567 | £602 | £599 | £678 | £753 | £875 | £790 | £810 | £816 | £922 | £832 | £996 |

TRIPLE GLAZED AND FIVE SEALS FOR AIR TIGHT CONSTRUCTION *WINDOW U VALUE WHEN INSTALLED WITH THERMAL FLASHING FTT U8 INCLUDES THE CHOSEN FLASHING KIT AND XDK INSUALTION KIT. PLEASE CHOOSE THE FLASHING KIT TO MATCH YOUR ROOF COVERING







Traditional pivot operation with raised axis to enable even tall people to stand in an open window. Counterbalanced pivot mechanism

Ideal for airtight construction

- Windows turn through 180° to clean outer pane from within the room
- Operating handle in base of the sash for ease of user
- Topsafe[®] system of burglary protection as standard
- 🜕 High quality close grain vacuum impregnated pine guaranteed to be knot free
- Suitable for pitches from 15° 70°
- Available in conservation style

ALL PRICES EXCLUDE VAT

FLASHINGS

ACCESSORIES pages 64-66

QUICK REF page 75 IN DETAIL pages 61-63



FPP preSelect ROOF WINDOWS THE WINDOW THAT GIVES YOU 2FOR1



rpp-v preselect

Topsafe[®] system of burglary protection as standard

Energy saving P2 glazing units (U-value of window 1.2 W/m²K)



FPW-V P2 preSelect

High quality close-grain
 vacuum - impregnated pine
 guaranteed to be knot-free,
 finished with white acrylic
 paint. Range of RAL colours to
 special order.
 Suitable for any room



FPU-V P2 preSelect

High quality, close-grain vacuum impregnated pine with a triple-coating of white polyurethane for a smooth, wipe-clean finish

Ideal for bathrooms, wetrooms, kitchens and environments with increased humidity



ROOF WINDOWS

TOP HUNG AND PIVOT DUAL FUNCTION WINDOWS - UNIQUE 2FOR 1

| | windows external dimensions [cm] | 55x78 | 55x98 | 55x118 | 66x98 | 66x118 | 78x98 | 78x118 | 78x140 | 78x160 | 94x118 | 94x140 | 114x118 | 114x140 | 134x98 | 94x160 |
|--------------------------------|---|-------|-------|--------|-------|--------|-------|--------|--------|--------|--------|--------|--------------------|------------------|--------|--------|
| | effective glazing area [m²] | 0.21 | 0.29 | 0.37 | 0.38 | 0.47 | 0.47 | 0.59 | 0.72 | 0.82 | 0.75 | 0.92 | 0.95 | 1.16 | 0.92 | 0.75 |
| | | 01 | 02 | 16 | 03 | 04 | 05 | 06 | 07 | 13 | 08 | 09 | 10 | 11 | 12 | 80 |
| FPP-V P2 (PINE) | P2 – Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.2 | - | £344 | £356 | £365 | £372 | £372 | £392 | £434 | £540 | £480 | £508 | £522 | £565 | £500 | £536 |
| FPU-V P2 (WHITE PU) | P2 – Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.2 | - | £390 | £400 | £418 | £440 | £411 | £465 | £514 | £625 | £520 | £601 | £617 | £650 | £620 | £633 |
| FPW-V P2 (WHITE ACRYLIC) | P2 – Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.2 | - | £344 | £356 | £375 | £387 | £372 | £409 | £452 | £540 | £480 | £528 | £542 | £565 | £521 | £557 |
| SIZES: 06 TO 8 | | | | | | | | | | | | | FLASHIN QUICK R | IGS EF page 7 | 75 | |







Change windows from top hung to centre pivot operation at the flick of a switch





Change windows from top hung to centre pivot operation at the flick of a switch

Windows turn through 180° to clean outer pane from within the room

Operating handle in the base of the sash for ease of use

- V40P automatic air vent to prevent unnecessary heat loss
- Topsafe[®] system of burglary protection as standard

High quality close-grain vacuum impregnated pine guaranteed to be knot-free. Range of RAL colours to special order.

- ear ty forglazing unit hail resistance warranty
- Suitable for pitches from 15° 55° (or non-standard option for opening from 15° - 85°)
- Available in conservation style

ALL PRICES EXCLUDE VAT



FPW-V preSelect FPU-V preSelect



■ Topsafe[®] system of burglary protection as standard

 Energy saving glazing units including P2 (U-value of window 1.2 W/m²K)



 High quality, close-grain vacuum impregnated pine with a triple-coating of white polyurethane for a smooth, wipe-clean finish

Ideal for bathrooms, wetrooms, kitchens and environments with increased humidity



FPW-V P2 preSelect

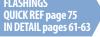
 High quality close-grain vacuum - impregnated pine guaranteed to be knot-free, finished with white acrylic paint. Range of RAL colours to special order.
 Suitable for any room



TOP HUNG AND PIVOT DUAL FUNCTION WINDOWS WHITE ACRYLIC - WHITE PU - COATED PINE

| | windows external dimensions [cm] | 55x78 | 55x98 | 55x118 | 66x98 | 66x118 | 78x98 | 78x118 | 78x140 | 78x160 | 94x118 | 94x140 | 114x118 | 114x140 | 134x98 | 94x160 |
|--|--|-------|-------|--------|-------|--------|-------|--------|--------|--------|--------|--------|---------|---------|--------|--------|
| | effective glazing area [m²] | 0.21 | 0.29 | 0.37 | 0.38 | 0.47 | 0.47 | 0.59 | 0.72 | 0.82 | 0.75 | 0.92 | 0.95 | 1.16 | 0.92 | 0.75 |
| | size symbol | 01 | 02 | 16 | 03 | 04 | 05 | 06 | 07 | 13 | 08 | 09 | 10 | 11 | 12 | 80 |
| FPW-V P2 preSelect (White Acrylic) | P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.2 | | £344 | £356 | £375 | £387 | £372 | £409 | £452 | £540 | £480 | £528 | £542 | £565 | £521 | £557 |
| FPU-V P2 preSelect | P2 – Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.2 | - | £390 | £400 | £418 | £440 | £411 | £465 | £514 | £625 | £520 | £601 | £617 | £650 | £620 | £633 |
| | | | | | | | | | | | | | FLASHIN | | | |

PLEASE CHOOSE THE FLASHING KIT TO MATCH YOUR ROOF COVERING









Change windows from top hung to centre pivot operation at the flick of a switch

Windows turn through 180° to clean outer pane from within the room

Operating handle in the base of the sash for ease of use

V40P automatic air vent to prevent unnecessary heat loss Suitable for pitches from 15° - 55° (or non-standard option for opening from 15° - 85°)

Clifetime glazing unit hail resistance warranty

year anty

Available in conservation style



PPP-V preSelect



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

Ideal for bathrooms, wetrooms, kitchens and environments with increased humidity





TOP HUNG AND PIVOT DUAL FUNCTION WINDOWS – PVC











Change windows from top hung to centre pivot operation at the flick of a switch

Windows turn through 180° to clean outer pane from within the room

Operating handle in the base of the sash for ease of use

V35 air inlet

Topsafe® system of burglary protection as standard

PVC profile with steel reinforcement for a smooth, wipe clean finish. Available in White, Golden Oak or Natural Pine veneer finishes Suitable for pitches from 15° - 55° (or non-standard option for opening from 15° - 85°)

Available in conservation style



BESPOKE offer, standard windows will be PINE,WHITE ACRYCLIC or WHITE POLYURETHANE.

FYP-V proSky FDY-V Duet proSky



FYP-V P2 proSky

One sash window

Install at pitches from 20-65°

V40P automatic air vent to prevent unnecessary heat loss



FDY-V P2 Duet proSky

Twin sash window in a single frame

- Install at pitches from 25-65°
- V40P automatic air vent to prevent unnecessary heat loss



PYP-V P2

Twin sash window in a single frame

Install at pitches from 20-65°

V35 air inlet



ROOF WINDOWS WITH RAISED AXIS OF ROTATION

| WINDOWS | 5 WITH RAISED AXIS OF | ROTATION | I | | | | | | | |
|----------------------------|--|----------|--------|--------|--------|--------|--------|--------|--------|--|
| | windows external dimensions [cm] | 78x140 | 78x160 | 78x180 | 78x206 | 94x140 | 94x160 | 94x180 | 94x206 | |
| | effective glazing area [m ²] | 0.73 | 0.85 | 0.96 | 1.12 | 0.92 | 1.07 | 1.22 | 1.42 | |
| | size symbol | 07 | 13 | 40 | 42 | 09 | 80 | 41 | 43 | |
| FYP-V P2 proSky Pine | P2 – Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.3 | £492 | £545 | £596 | £654 | £550 | £616 | £672 | £728 | |
| PYP-V P2 proSky PVC | P2 – Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.3 | £526 | £584 | N/A | N/A | £588 | N/A | N/A | N/A | |

| WITH LOWE | R TRANSOM | | | | | | |
|-------------------------|--|--------|--------|--------|--------|--------|--------|
| | windows external dimensions [cm] | 78x186 | 78x206 | 78x235 | 94x186 | 94x206 | 94x235 |
| | effective glazing area [m²] | 0.91 | 1.12 | 1.20 | 1.15 | 1.30 | 1.52 |
| | size symbol | CA | CB | CC | DA | DB | DC |
| FDY-V P2 Duet proSky | P2 – Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.3 | £702 | £766 | £890 | £756 | £826 | £950 |





Image: Second second

Traditional pivot operation with raised axis to enable even tall people to stand in an open window. Counterbalanced pivot mechanism

Increased window height using traditional widths

Windows turn through 160° to clean outer pane from within the room

Operating handle in the base of the sash for ease of use

Topsafe® system of burglary protection as standard

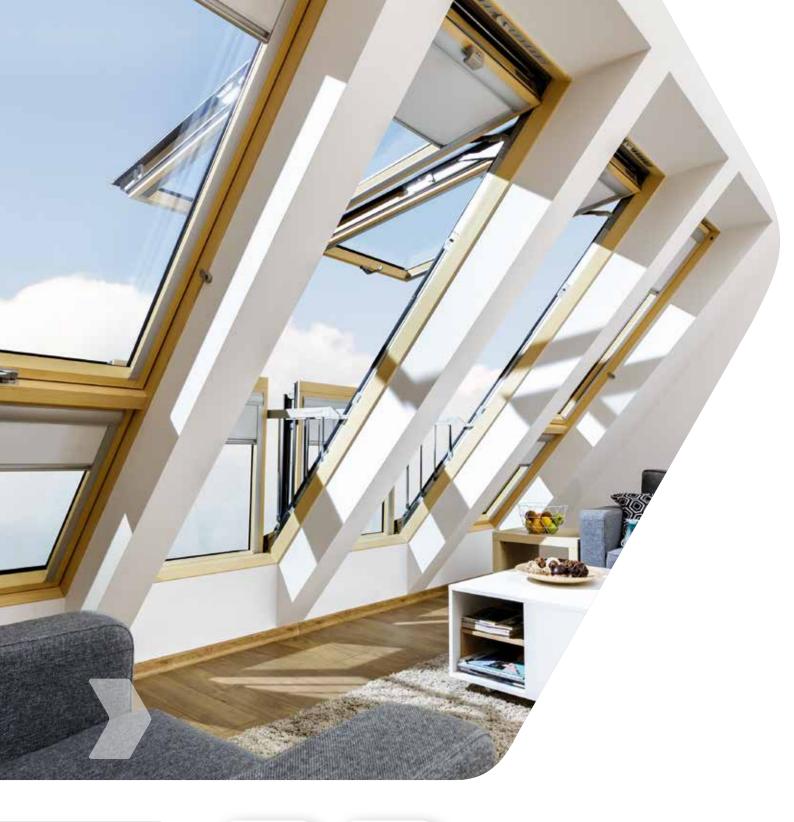
Bigh quality close-grain vacuum impregnated pine guaranteed to be knot-free. Range of RAL colours to special order

Available in conservation style

FLASHINGS QUICK REF page 75 IN DETAIL pages 61-63

ACCESSORIES pages 64-66

ALL PRICES EXCLUDE VAT WWW









The contemporary alternative to a dormer at far lower cost. 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

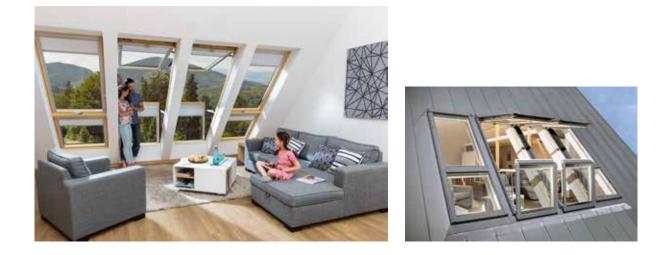
When closed, balustrades are hidden below the window, the profile of which is undistinguishable from a standard Duet window. With no element above the roofline there is no risk of dirt accumulating Use in combination with other roof windows using the K_/G flashing
Also available in white, please ask for details



BALCONY WINDOW

| BALCONY | WINDOW | | |
|-----------------------|--|--------|--------|
| | windows external dimensions [cm] | 78x255 | 94x255 |
| | effective glazing area [m ²] | _ 0.92 | _ 1.67 |
| | size symbol | CA | СВ |
| FGH-V P2 Galeria | P2 – Anti-burglary double glazed unit. U value of window 1.5 | £2350 | £2350 |
| FGH-V P5 Galeria | P5 – Anti-burglary double glazed unit. Class P2A U value of window 1.1 | £2800 | £2 800 |
| FGH-V/U P2 Galeria | P2 – Anti-burglary double glazed unit. U value of window 1.5 | £2450 | £2450 |
| FGH-V/U P5 Galeria | P5 – Anti-burglary double glazed unit. Class P2A U value of window 1.1 | £2900 | £2900 |

PLEASE NOTE WHEN ORDERING FGH-V GALERIA WINDOW IT IS REQUIRED TO FILL IN THE FORM WHICH IS TO BE FOUND AT WWW.FAKRO.CO.UK



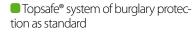


Twin sash balcony window

Windows turn through 180° to clean outer pane from within the room

Operating handle in the base of the upper sash for ease of use

V40P automatic air vent to prevent unnecessary heat loss



High quality close-grain vacuum impregnated pine guaranteed to be knot-free O White finish also available please ask for details

Suitable for pitches from 35° - 55°

Available in conservation style







Tilt and turn opening window
Side handle operation
Key operated lock and muti-point locking fittings
Left and right hand opening options



BVP

Tilt opening
Top handle operation
Key operated lock and muti-point option



BXP

Non-opening option



L-SHAPE COMBINATION WINDOWS

L-SHAPED WINDOW FOR COMBINING WITH A PITCHED ROOF WINDOW - CANNOT BE USED ON THEIR OWN

| | windows external dimensions [cm] | 78x60 | 78x75 | 78x95 | 78x115 | 78x137 | 94x60 | 94x75 | 94x95 | 94x115 | 114x60 | 114x75 | 114x95 | 114x115 | 134x60 |
|-----------------------|---|-------|-------|-------|--------|--------|-------|-------|-------|--------|--------|--------|--------|---------|--------|
| | effective glazing area [m ²] | 0,25 | 0,33 | 0,45 | 0,57 | 0,71 | 0,31 | 0,42 | 0,58 | 0,33 | 0,40 | 0,53 | 0,73 | 0,92 | 0,61 |
| | | 33 | 81 | 82 | 83 | 84 | 34 | 85 | 86 | 87 | 35 | 89 | 90 | 91 | 36 |
| BDL P2/ BDR P2 | P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.3 | £525 | £580 | £630 | £700 | £775 | N/A | £620 | £690 | £750 | N/A | N/A | £745 | £820 | N/A |
| BVP P2 | P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1,3 | £338 | £355 | £375 | £422 | £465 | £375 | £395 | £418 | £460 | £392 | £420 | £435 | £480 | £425 |
| BXP P2 | P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.3 | £275 | £286 | £298 | £332 | £360 | £298 | £310 | £324 | £352 | £348 | £376 | £415 | £455 | £395 |
| BDL/W P2/ BDR/W P2 | P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.3 D2 - Safety double glazed unit. | £565 | £622 | £675 | £754 | £828 | N/A | £662 | £735 | £808 | N/A | N/A | £792 | £876 | N/A |
| BVW P2 | P2 – Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.3 | £378 | £398 | £420 | £470 | £516 | £420 | £440 | £464 | £510 | £438 | £464 | £480 | £530 | £474 |
| BXW P2 | P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.3 | £308 | £322 | £332 | £372 | £402 | £332 | £345 | £362 | £394 | £386 | £420 | £462 | £508 | £440 |
| BDL/U P2/ BDR/U P2 | P2 – Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1,3 | £578 | £638 | £694 | £770 | £852 | N/A | £682 | £760 | £825 | N/A | N/A | £820 | £902 | N/A |
| BVU P2 | P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.3 | £385 | £405 | £428 | £482 | £532 | £428 | £452 | £480 | £525 | £448 | £480 | £494 | £560 | £485 |
| BXU P2 | P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.3 | £332 | £346 | £360 | £402 | £440 | £360 | £374 | £395 | £430 | £418 | £451 | £498 | £546 | £474 |

WINDOWS AVAILABLE IN P5 TRIPLE GLAZED; L-SHAPED WINDOWS IN BLOCK COMBINATIONS AVAILABLE AS WELL- CONTACT FAKRO SALES OFFICE FOR DETAILS.

FLASHING FOR L-SHAPED WINDOW

| | 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 | £152 | £162 | £173 | £170 | £172 | £172 | £179 | £177 | |
| EUV/B | for Tiles | £129 | £134 | £139 | £137 | £139 | £139 | £144 | £142 | |





Combine with any standard FAKRO roof window. Extend glazing area from the roof into the wall







High quality close-grain vacuum impregnated pine guaranteed to be knot-free Join with roof windows with a pitch from 15° - 55°
 White finish also available please ask for details







- Right and left opening*
 Open to 90°
 Gas piston to assist opening and to prevent slamming
 5 flashing options to suit specific roof covering**

- Conservation style available

FWR-right

32dB acoustic performance
 Suitable for pitches of 15°-55°

- NOTE: * WHEN ORDERING NOTE TO CHOOSE SIDE HUNG OPENING OPTION WHEN VIEWED FROM THE OUTSIDE ** ORDER FLASHINGS SPECIFIC TO THESE WINDOWS DO NOT USE STANDARD FLASHINGS



MEANS OF ESCAPE AND ACCESS ROOF LIGHTS

| SIDE HUNG ESCAPE | WINDOW | | | | | | | |
|-------------------------------------|---|-------|-------|--------|-------|--------|-------|--------|
| | windows external dimensions [cm] | 66x78 | 66x98 | 66x118 | 78x98 | 78x118 | 94x98 | 94x118 |
| | size symbol | 22 | 03 | 04 | 05 | 06 | 15 | 08 |
| FWL P2 & FWR P2 | Natural Pine. P2 Energy saving double glazed, U value of window 1.4 | £345 | £345 | £360 | £435 | £472 | £522 | £552 |
| FWL/U P2 & FWR/U P2 | White PU Coated Pine. P2 Energy saving double glazed, U value of window 1.4 | £430 | £430 | £450 | £552 | £598 | £662 | £695 |
| FWL/C P2 & FWR/C P2 | Natural Pine. P2 Energy saving double glazed. Conservation style, U value of window 1.4 | £464 | £466 | £512 | £600 | £680 | £706 | £745 |
| FWL/W P2 & FWR/W P2 | White Acrylic. P2 Energy saving double glazed, U value of window 1.4 | £380 | £380 | £396 | £478 | £520 | £574 | £608 |
| | | | | | | | | |
| FLASHING FOR SIDE | HUNG ESCAPE WINDOW | | | | | | | |
| ELW Flashing for slate up to | o 8mm thick | £71 | £72 | £74 | £75 | £79 | £84 | £84 |
| EZW-A Flashing for tile pro | files up to 45mm | £71 | £72 | £74 | £75 | £79 | £84 | £84 |
| EHW-A Flashing for tile pro | files up to 90mm | £81 | £81 | £84 | £84 | £89 | £95 | £95 |
| ESW Flashing for flat roofin | g materials | £62 | £62 | £64 | £65 | £70 | £74 | £74 |
| EPW Flashing for plain tiles | up to 15mm | £74 | £75 | £76 | £76 | £82 | £87 | £87 |
| ELW/C Conservation flashin | ng for slate up to 8mm thick | £90 | £90 | £94 | £94 | £100 | £107 | £107 |
| EZW-A/C Conservation flag | shing for tile profiles up to 45mm | £90 | £90 | £94 | £94 | £100 | £107 | £107 |
| EHW-A/C Conservation fla | shing for tile profiles up to 90mm | £103 | £103 | £107 | £107 | £113 | £121 | £121 |
| ESW/C Conservation flashin | ng for flat roofing materials | £76 | £76 | £80 | £80 | £88 | £94 | £94 |
| EPW/C Conservation flashi | ng for plain tiles up to 15mm | £94 | £94 | £97 | £97 | £103 | £110 | £110 |

01

£222

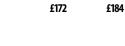
£260

STANDARD ACCESS ROOF LIGHTS external dimensions [cm] size symbol 46x55 46x75 46x61 dimensions [cm] size symbol external dimensions [cm] size symbol WGT £110 £119 N/A WLI

£140

N/A

£252



£131





WG_

WGI

WGI/C

 Top hung opening
 Choice of glazing options
 WGT version with single toughened glass
 4H,
 WGI version with integrated toughened glass 4H-10-4H. Equipped with sash turn limiter which holds the sash stable when opened and prevents it slamming shut accidentally Conservation style available Universal flashing Suitable for pitches of 15°-60°.

WLI/C



- Right and left opening
- Conservation style available
- Universal flashing
- Suitable for pitches of 15°-70°
- 5 year warranty

FSP WINDOW IN THE ROOF

FAKSV (CENTRE PIVOT) WINDOW IN THE ROOF ALDELIGIERED.



SMOKE VENTILATION SYSTEMS FOR PITCHED ROOFS

FSP SMOKE VENTILATION ROOF WINDOWS (EN12 10112: 2003)

Are electronically operated and activated by a smoke sensor built into the control unit. A signal from the sensor triggers automatic operation of the motor. The sash is hinged at the bottom and acts as a wind break allowing fast and effective smoke ventilation.



Control Unit with break glass and battery back up

1 x smoke sensor, 1 x break glass alarm

1x wind

£1425

134x140

FAKS V17





The domed flat roof window is available in the following versions:

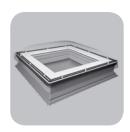
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Gwave
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DEC Electrically opened wireless Z-Wave system Rain sensor



DMC Manually opened



DXC Non-opening



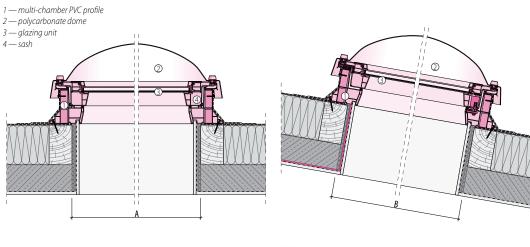
DOMED FLAT ROOF WINDOWS

SIZES OF FLAT ROOF WINDOW

| | dimensions [cm] Minimum roof opening [cm] Maximum roof openng [cm] | 60x60 60x60 65x65 | 60x90 60x90 65x95 | 70x70 70x70 75x75 | 80x80 80x80 85x85 | 90x90 90x90 95x95 | 90x120 90x120 95x125 | 100x100 100x100 105x105 | 100x150 100x150 105x155 | 120x120 120x120 125x125 |
|---------------------|--|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|----------------------------|-------------------------------|-------------------------------|-------------------------------|
| | Effective glazed area [m ²] | 0,23 | 0,37 | 0,33 | 0,46 | 0,6 | 0,83 | 0,77 | 1,21 | 1,16 |
| DXC-C P2 | Non-opening P2 – Anti-burglary double glazed unit. U value of window 1.2 | £469 | £501 | £508 | £527 | £603 | £694 | £656 | £834 | £797 |
| DXC-C P4 Secure* | Non–opening P4 – Anti-burglary double glazed unit. U value of window 1.2 | £540 | £600 | £615 | £615 | £710 | £790 | £770 | £980 | £950 |
| DMC-C P2 | Manually opening P2 – Anti-burglary double glazed unit. U value of window 1.2 | £610 | £675 | £695 | £698 | £798 | £890 | £865 | £1 110 | £1075 |
| DMC-C P4 Secure* | Manually opening P4 – Anti-burglary double glazed unit. U value of window 1.2 | £672 | £745 | £770 | £770 | £880 | £980 | £955 | £1225 | £1 180 |
| DEC-C P2 | Electrically opening P2 – Anti-burglary double glazed unit. U value of window 1.2 | £859 | £891 | £908 | £917 | £993 | £1084 | £1046 | £1224 | £1 187 |
| DEC-C U8 (VSG) | U8 - Passiv quadruple glazed unit. U value of window 0.72** | £1 300 | £1 360 | £1400 | £1 410 | £1550 | £1700 | £1650 | £1950 | £1900 |

* 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

Cross-section of DEC flat roof windows





High energy-efficiency. Perfect thermal insulation parameters. The DEC-C U8 window with passive U8 (VSG) glazing unit is characterized by heat transmittance co-efficient for the whole window of U=0.55 W/m²K according to EN1873 standard (for the size 120x120cm). Standard P2 glazing unit features coefficient U=1.2 W/m²K

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, which raises the window and allows its installation, e.g. in green or living roofs ZSD universal telescopic rod available for opening and closing flat roof windows and internal blinds, see page 70







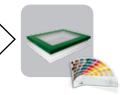
DEFElectrically opened wireless Z-Wave systemRain sensor



DMF Manually opened



DXF Non-opening



D_F ColourLine are available in any colour from RAL Classic palette.



NON DOMED FLAT ROOF WINDOWS

SIZES OF FLAT ROOF WINDOW

| | 1· · · · · · | 60x60 | 60x90 | 70x70 | 80x80 | 90x90 | 90x120 | 100x100 | 100x150 | 120x120 |
|---------------------|---|----------------|-------------------------|-------------------------|-------------------------|-------------------------|----------------------------|-------------------------------|-------------------------------|-------------------------------|
| | dimensions [cm] Minimum roof opening [cm] Maximum roof openng [cm] | 60x60 65x65 | 60x90 60x90 65x95 | 70x70 70x70 75x75 | 80x80 80x80 85x85 | 90x90 90x90 95x95 | 90x120 90x120 95x125 | 100x100 100x100 105x105 | 100x150 100x150 105x155 | 120x120 120x120 125x125 |
| | Effective glazed area [m ²] | 0,23 | 0,37 | 0,33 | 0,46 | 0,6 | 0,83 | 0,77 | 1,21 | 1,16 |
| DXF-D U6 | Non opening. U6 – High energy efficient triple glazed unit. U value of window 0.70 | £858 | £926 | £952 | £956 | £1072 | £1 190 | £1 156 | £1428 | £1385 |
| DXF-D U6 Secure* | Non opening. U6 – High energy efficient triple glazed unit. U value of window 0.70 | £946 | £1 018 | £1046 | £1050 | £1 175 | £1298 | £1275 | £1 555 | £1514 |
| DMF-D U6 | Manually opening. U6 – High energy efficient triple glazed unit. U value of window 0.70 | £960 | £1038 | £1072 | £1080 | £1208 | £1326 | £1292 | £1606 | £1548 |
| DMF-D U6 Secure* | Manually opening. U6 - High energy efficient triple glazed unit. U value of window 0.70 | £1054 | £1 135 | £1 178 | £1 182 | £1 318 | £1454 | £1 412 | £1752 | £1700 |
| DEF-D U6 | Electrically opening. U6 - High energy efficient triple glazed unit. U value of window 0.70 | £1 190 | £1258 | £1285 | £1 292 | £1428 | £1548 | £1514 | £1785 | £1742 |
| DXF-D U8 | Non opening. U8 – Passive quadruple glazed unit. U value of window 0.64 | £1 122 | £1208 | £1235 | £1248 | £1395 | £1 530 | £1504 | £1854 | £1785 |
| DMF-D U8 | Manually opening. U8 - Passive quadruple glazed unit. U value of window 0.64 | £1 198 | £1 300 | £1344 | £1352 | £1514 | £1658 | £1615 | £1 998 | £1 955 |
| DEF-D U8 | Electrically opening. U8 - Passive quadruple glazed unit. U value of window 0.64 | £1445 | £1 514 | £1564 | £1576 | £1700 | £1870 | £1828 | £2168 | £2108 |

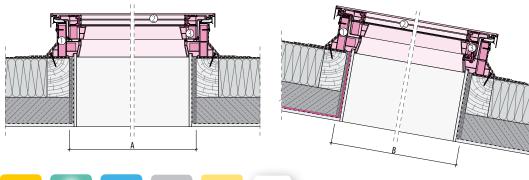
* DU6 SECURE WINDOW OFFERS INCREASED LEVELS OF SECURITY AND ACHIEVES ANTI-BURGLARY RC2 AS PER EN1627 (DOCUMENT Q) ** THIS WINDOW DOES NOT HAVE PASSIVE CERTIFICATION

Cross-section of DEF flat roof windows

1 —multi-chamber PVC profile

2 —glazing unit

3 — sash





The D_F non-domed flat roof window is characterized by exceptional thermal insulation qualities and innovative design

Modern window bonding technology gives a highly aesthetic and innovative design. Provides a large amount of natural light

The D_F window can be manufactured in a wide range of sizes and is an ideal replacement for old skylights that do not meet current thermal insulation parameters

To ensure the flow of water from the glass surface of D_F non domed windows, the window should be installed with a pitch of at least 2°. Flat roofs generally have a pitch of 3-4°.

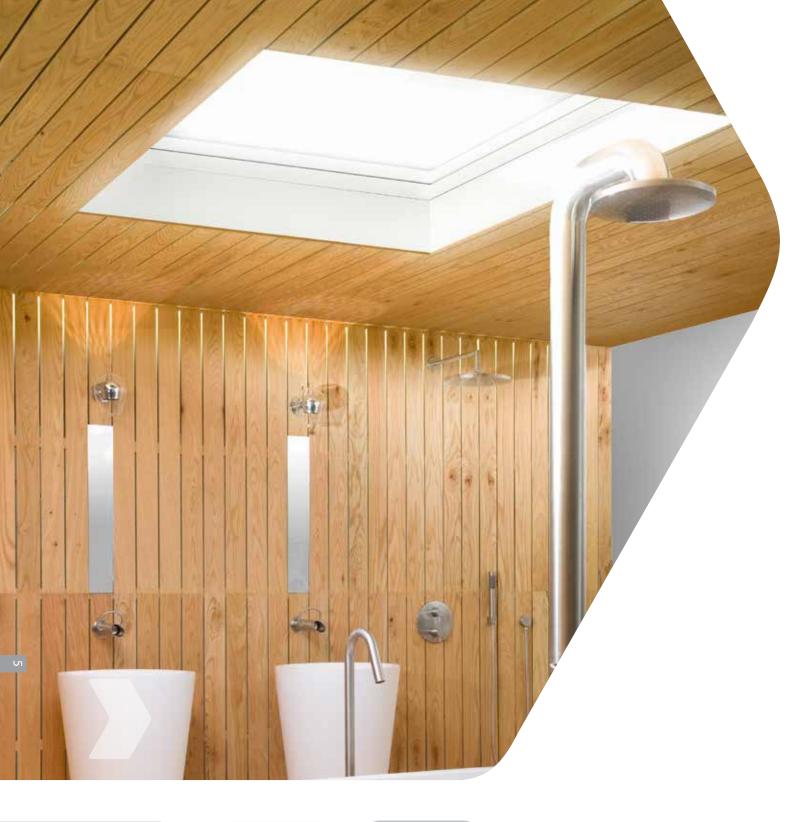
The flat roof window can be also mounted on an additional base with a height of 15cm, which raises the window and allows its installation, e.g. in green or living roofs

Window design allows for the installation of internal and external accessories

ZSD universal telescopic rod available for opening and closing flat roof windows and internal blinds, see page 70

01283 554755

CCESSORIES
age 64-66



D_F Secure, D_C Secure



D_F Secure



D_C Secure

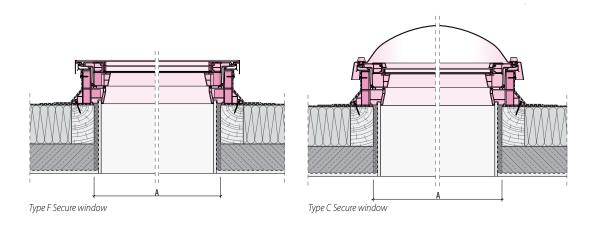


SIZES OF FLAT ROOF WINDOW

| | dimensions [cm] Minimum roof opening [cm] Maximum roof openng [cm] | 60x60 60x60 65x65 | 60x90 60x90 65x95 | 70x70 70x70 75x75 | 80x80 80x80 85x85 | 90x90 90x90 95x95 | 90x120 90x120 95x125 | 100x100 100x100 105x105 | 100x150 100x150 105x155 | 120x120 120x120 125x125 |
|---------------------|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|----------------------------|-------------------------------|-------------------------------|-------------------------------|
| | Effective glazed area [m ²] | 0,23 | 0,37 | 0,33 | 0,46 | 0,6 | 0,83 | 0,77 | 1,21 | 1,16 |
| DXC-C P4 Secure* | Non–opening P4 – Anti-burglary double glazed unit. U value of window 1.2 | £540 | £600 | £615 | £615 | £710 | £790 | £770 | £980 | £950 |
| DMC-C P4 Secure* | Manually opening P4 – Anti-burglary double glazed unit. U value of window 1.2 | £672 | £745 | £770 | £770 | £880 | £980 | £955 | £1225 | £1 180 |
| DXF-D U6 Secure* | Non opening. U6 – High energy efficient triple glazed unit. U value of window 0.70 | £946 | £1 018 | £1046 | £1050 | £1 175 | £1298 | £1275 | £1 555 | £1 514 |
| DMF-D U6 Secure* | Manually opening. U6 - High energy efficient triple glazed unit. U value of window 0.70 | £1054 | £1 135 | £1 178 | £1 182 | £1318 | £1454 | £1412 | £1752 | £1700 |

* DUG SECURE WINDOW OFFERS INCREASED LEVELS OF SECURITY AND ACHIEVES ANTI-BURGLARY RC2 AS PER EN1627 (DOCUMENT Q) ** THIS WINDOW DOES NOT HAVE PASSIVE CERTIFICATION

Cross-section of type Secure flat roof windows





Secure type flat roof windows are available and feature anti-burglary properties. They are equipped with a number of features aimed at enhancing both safety and security parameters.

The type F windows (DMF DU6 Secure, DXF DU6 Secure) as well as the type C windows (DXC P4 Secure, DMC P4 Secure) comply with European anti-burglary class RC2 (EN 1627).

An abundance of natural light. The specially designed shape of the window profiles has a glazing area up to 16% greater than those of competitors.

D_F Secure windows come with a highly energy-efficient, double chamber DU6 glazing unit with a Class P4A anti-burglary inner pane. The whole window U-value is 0.70 W/ m²K (EN 14351-1).

D_C Secure windows come with an energy-efficient, single chamber glazing unit with a Class P4A anti-burglary inner pane. The whole window U-value is 1.2 W/m²K (EN 12567-2).

The structure of the window enables installation of internal as well as external accessories.

The type F flat roof window is suitable for roof pitches between 2 and 15°, while the type F is designed for pitches between 0 and 15°.



DRC DRF



DRF Flat access roof light without dome



DRC Flat access roof light with dome

The dome can be transparent DRC-C or opaque DRC-M.

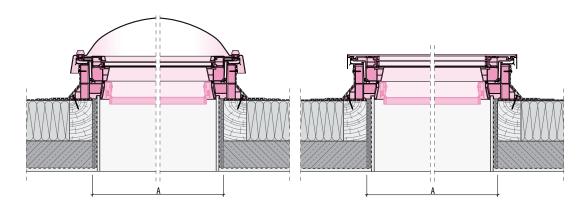


| SIZES OF FLAT R | OOF WINDOWS | | | | |
|--|--|-------------------------|----------------------------|-------------------------------|-------------------------------|
| | dimensions [cm] Minimum roof opening [cm] Maximum roof openng [cm] | 90x90 90x90 95x95 | 90x120 90x120 95x125 | 100x100 100x100 105x105 | 120x120 120x120 125x125 |
| | Effective glazed area [m²] | 0,6 | 0,83 | 0,77 | 1,16 |
| DRF DU6 | Flat access roof light without the dome. U6 – High energy efficient triple glazed unit. U value of window 0.74* | £1400 | £1 550 | £1 500 | £1800 |
| DRC-C P2 | Flat access roof light with the dome. P2 – Anti-burglary double glazed unit. U value of window 0.88** | £980 | £1080 | £1060 | £1320 |
| * ACCORDING TO EN1435 ** ACCORDING TO EN1873: | | | | | |

CROSS-SECTION OF FLAT ACCESS ROOF LIGHTS

ACCESSORIES page 64-66

Cross-section of flat access roof lights

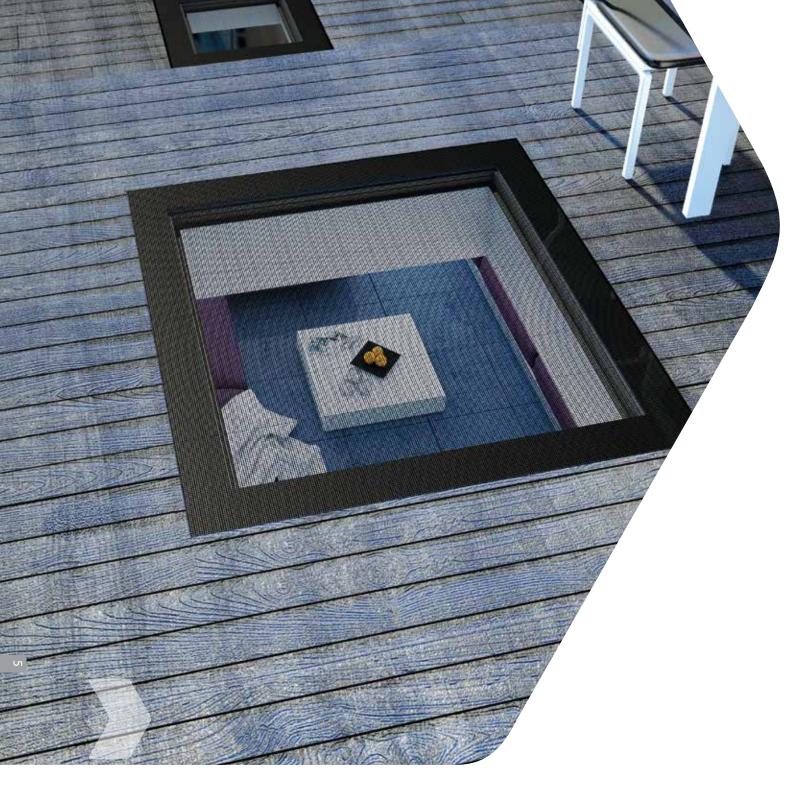




Provide safe and convenient access to the flat roof. Special hinges and functional opening system used in the access roof light ensure easy sash opening up to 80°. Gas springs facilitate operation of the sash and keep it stable in the open position, thus protecting against accidental closing. What is 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 The frame of the flat roof window is manufactured from multi-chamber PVC profiles filled inside with insulation material. In the DRF access roof light, the upper part of the window is equipped with innovative flat glazing unit and DRC has a dome made of durable polycarbonate.

The type C flat access roof light is intended for roofs with pitches between 0° and 15°, while the type F flat access roof light is designed for installation in roofs with pitches between 2° and 15°. Window can be mounted on an additional 15cm high base (XRD), e.g. for installation on a green roof.

The window design allows installation of both internal and external accessories (DRC internal accessories only). External awning blind protects the room from overheating, while internal accessories provide protection from intense sunlight and enhance interior design.







The DXW flat roof window offers a completely new approach to be taken with flat roof design. Its specially strengthened sash and frame enable it to be installed completely flush within the roofline.

With special design features such as enhanced load-bearing capacity and a lasting, non-slip surface you can walk across its surface freely.

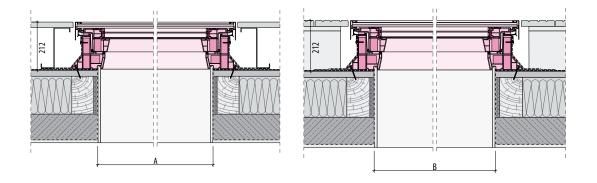


FLAT ROOF WINDOW DXW WALK ON WINDOW

| FLAT ROOF WINDOWS | | | | | | | | |
|---------------------------------|--------|--------|--------|--------|--------|--------|---------|---------|
| window size [cm] | 60x60 | 60x90 | 70x70 | 80x80 | 90x90 | 90x120 | 100x100 | 120x120 |
| glazing area [m²] | 0,23 | 0,37 | 0,33 | 0,46 | 0,6 | 0,83 | 0,77 | 1,16 |
| size symbol | 01K | 02K | 03K | 04K | 05K | 06K | 07K | 08K |
| DXW U=0.70 W/m ² K * | £1 404 | £1 508 | £1 560 | £1 580 | £1 748 | £1 924 | £1 872 | £2 268 |

* ACCORDING TO EN 14351-1:2006+A1:2010

Cross-section of DXW flat roof window



DXW

providing a surface level with the roof and a special non-slip surface to ensure

- complete safety when walking across it
- enhanced load capacity
- high resistance to break-in attempts thanks to reinforced design
- reduced heat loss (Uw=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



- 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°.
- It is possible to install the same internal accessories which are used in all our type F flat roof windows.







DSF smoke ventilation flat roof window



DSC-C smoke ventilation flat roof window with a dome made of durable polycarbonate.



SMOKE VENTILATION FLAT ROOF WINDOWS FLAT ROOF SMOKE VENTILATION

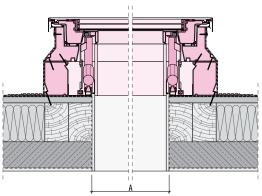
| SMOKE VENTILA | FION FLAT ROOF V | VINDOWS | | |
|-------------------|---------------------------|---------|---------|--------------|
| window size [cm] | | 100x100 | 105x105 | 120x120 |
| glazing area [m²] | | 0,90 | 1,00 | 1,32 |
| size symbol | | 07K | 12 K | 08K |
| DSF DU6 | Ug=0.5 W/m²K | N/A | £5 600 | £5 900 |
| DSC-C2 P2 | Ug=1.2 W/m ² K | £3 900 | N/A | £4 300 |
| ADDITIONAL ELEME | ENTS: | | | |
| RAIN SENSOR ZRD | | £72 | | |
| VENTILATION SWIT | CH WHITE LP1W | £45 | | |
| VENTILATION SWIT | CH BLACK LP1B | £55 | MINE | 0W/ CI7E 10E |



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

WINDOW SIZE 105 X 105CM PROVIDES A GEOMETRIC SMOKE VENTIALTION AREA OF 1.0M2

Cross-section of smoke ventilation flat roof windows



Smoke ventilation window DSF

Smoke ventilation window DSC

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.



An abundance of natural light in buildings with flat roofs.

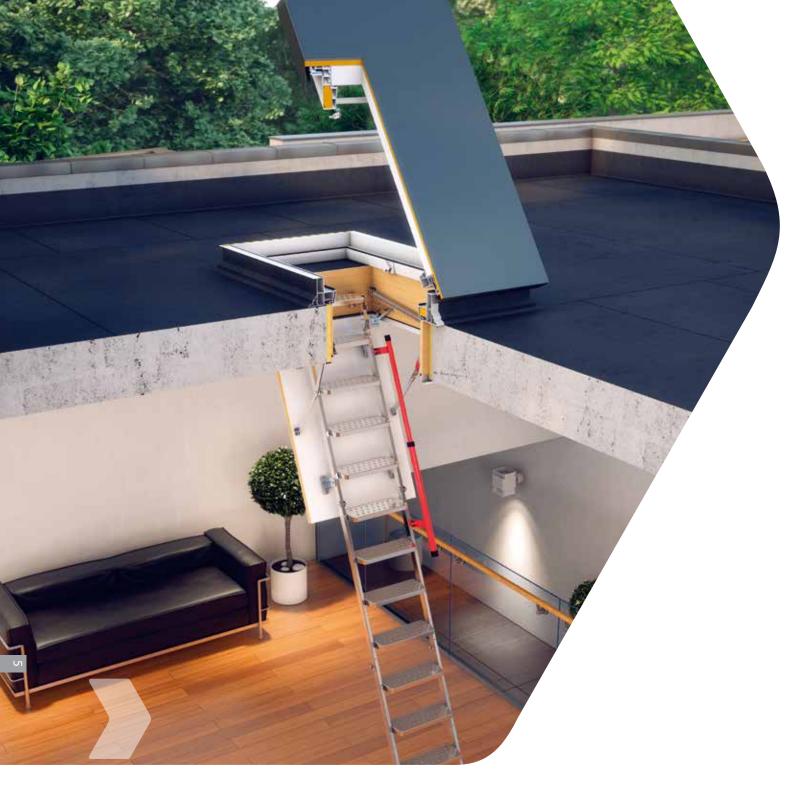
The frame of the smoke ventilation window is constructed of multi-chamber PVC profiles filled with insulation material.

Easy opening to set the window in standard ventilation position (everyday flow of fresh air).

The sash raises to a height of 23cm when used for everyday ventilation, but in the event of fire it raises to 50cm. Elements of the sash lifting mechanism are not visible with the window closed.

Opening mechanism and two or four 24V actuators ensure perfect operation and ease of access for maintenance purposes.

Suitable for roof pitches between 0° and 15°. When installing windows must be level.



DRL + LML



roof access door

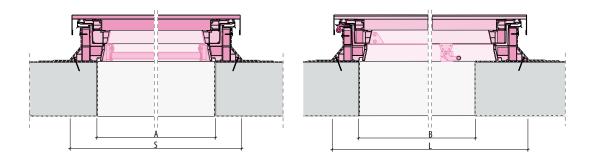
LML Loft Ladder*

╋



| FLAT ROOF ACCESS DOOR | | | | | | |
|----------------------------|--------|--------|--------|--------|--------|--------|
| Roof access door size [cm] | 60x120 | 70x120 | 70x130 | 70x140 | 86x130 | 92x130 |
| DRL + LML 280cm | £1 500 | £1 550 | £1 600 | £1 650 | £1 940 | £2 000 |
| DRL + LML 305cm | N/A | N/A | £1 630 | £1 685 | £2 005 | £2 050 |

PRICE INCLUDES THE ACCESS DOOR AND THE LML LOFT LADDER AS INDIVIDUAL ITEMS FOR ON SITE INSTALLATION





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 sash can be opened up to 60°. Gas springs facilitate opening and closing and the sash can be left in open position. Anti-slip tape on the base ensures safe access to the flat roof. Sizes of the roof access door are adjusted according to the size of loft ladder (loft ladders are sold separately - see Loft Ladder Catalogue).

Can be mounted on an additional XRD/W base with a height of 15cm, for installation in green and living roofs. Option to install an additional ZBR lock which protects against accidental closure of the sash.

 Suitable for roof pitches between 0° and 5°.





| THE TYPE OF FLASHING KIT REQUIRED W | HEN ORDERING ONE OF IF | 1E CONSERVATION KIT PACKAGES |
|-------------------------------------|------------------------|------------------------------|

CENTRE PIVOT - NATURAL PINE & WHITE ACRYLIC, MANUAL OPERATION

| CENTRE PIVOT - NATURAL FINE & WHITE ACKTER, MANUAL OPERATION | | | | | | | | | | | | | | | | |
|--|--|-------|-------|--------|-------|--------|-------|--------|--------|--------|--------|--------|---------|---------|--------|--------|
| | 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 | 1.07 |
| | | 01 | 02 | 16 | 03 | 04 | 05 | 06 | 07 | 13 | 08 | 09 | 10 | 11 | 12 | 80 |
| FTP-V/C P2 (V) Kit Natural Pine | P2-Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.2 | £375 | £393 | £409 | £430 | £446 | £451 | £505 | £545 | £620 | £560 | £580 | £595 | £650 | £661 | £700 |
| FTP-V/C P2 (J) Kit Natura Pine | P2-Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.2 | £400 | £426 | £443 | £465 | £483 | £500 | £544 | £587 | £680 | £600 | £640 | £665 | £702 | £709 | £780 |
| FTW-V/C P2 (V) Kit White Acrylic | P2 – Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.2 | £382 | £400 | £416 | £437 | £453 | £458 | £514 | £554 | £630 | £570 | £590 | £605 | £660 | £673 | £710 |
| FTW-V/C P2 (J) Kit White Acrylic | P2-Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.2 | £412 | £438 | £455 | £477 | £495 | £514 | £558 | £601 | £692 | £614 | £654 | £675 | £712 | £726 | £792 |
| FTU-V/C P2 White Polyurethane | P2-Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.2 | £392 | £425 | £450 | £450 | £458 | £465 | £510 | £590 | £660 | £605 | £630 | £650 | £690 | £638 | £765 |
| FTP-V/C P2 Natural Pine | P2-Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.2 | £308 | £322 | £335 | £352 | £365 | £370 | £414 | £446 | £508 | £459 | £475 | £488 | £533 | £542 | £574 |

* INCLUDES FTP-V/C U3, CONSERVATION FLASHING (STANDARD DEPTH) AND XDP INSULATION SET **PLEASE ADVISE THE TYPE OF FLASHING KIT REQUIRED WHEN ORDERING ONE OF THE CONSERVATION KIT PACKAGES

CENTRE PIVOT - ELECTRONICALLY OPERATED NATURAL PINE & WHITE ACRYLIC

| FTP-V/C P2 Z-Wave Natural Pine | P2-Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.2 | £667 | £705 | £739 | £741 | £799 | £808 | £865 | £893 | £923 | £912 | £936 | £946 | £988 | £946 | £980 |
|---------------------------------------|---|------|------|------|------|-------|-------|--------|--------|------|--------|------|------|-------|------|--------|
| FTP-V/C P5 Z-Wave Natural Pine | P5 - Safety triple glazed unit. Toughened outer pane. Laminated inner pane. U value of window 0.97 | £750 | £790 | £830 | £835 | £880 | £890 | £970 | £1020 | N/A | £1045 | N/A | N/A | N/A | N/A | N/A |
| FTW-V/C P2 Z-Wave White Acrylic | P2–Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.2 | £694 | £734 | £768 | £770 | £830 | £840 | £900 | £928 | £960 | £948 | £974 | £984 | £1028 | £984 | £1 020 |
| FTW-V/C P5 Z-Wave White Acrylic | P5-Safety triple glazed unit. Toughened outer pane. Laminated inner pane. Uvalue of window 0.97 | £860 | £908 | £954 | £960 | £1012 | £1023 | £1 115 | £1 173 | N/A | £1 202 | N/A | N/A | N/A | N/A | N/A |

WHITE POLYURETHANE CONSERVATION WINDOWS ARE ALSO AVAILABLE - PLEASE CONTACT THE FAKRO SALES OFFICE FOR FURTHER DETAILS

FAKRO has an extensive range of conservation roof windows and also routinely manufactures products to bespoke design requirements. The characteristic features of such windows are their black vertical mullion bar, cladding and flashing (to RAL9005) but from a user's perspective they offer all of our standard features and contemporary interior styling. As such, we offer a choice of natural pine, white acrylic, white PUcoated pine and PVC windows.

Whether for a listed building or a traditional barn conversion, FAKRO conservation style roof windows offer the critical facility to install them low within the roof line. Three depth options are available to suit all coverings: Standard depth (denoted by the last letter 'V' e.g. EZV) Installation 3cm higher than standard depth (denoted by the last letter 'N') Installation 3cm lower than standard depth (denoted by the letter 'J') 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 8mm 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.

| CENTRE PI | VOT - PVC WHITE | (ALSO | AVAILA | BLE IN F | PINE OR | GOLDE | N OAK | to ord | ER, PRI | CES ON | REQUE | ST) | | | | |
|-------------|--|-------|--------|----------|---------|--------|-------|--------|---------|--------|--------|--------|---------|---------|--------|--------|
| | windows external dimensions [cm] | 55x78 | 55x98 | 55x118 | 66x98 | 66x118 | 78x98 | 78x118 | 78x140 | 78x160 | 94x118 | 94x140 | 114x118 | 114x140 | 134x98 | 94x160 |
| | effective glazing area [m²] | 0.21 | 0.29 | 0.37 | 0.38 | 0.47 | 0.47 | 0.59 | 0.72 | 0.82 | 0.75 | 0.92 | 0.95 | 1.16 | 0.92 | 1.07 |
| | size symbol | 01 | 02 | 16 | 03 | 04 | 05 | 06 | 07 | 13 | 08 | 09 | 10 | 11 | 12 | 80 |
| PTP-V/C P2 | P2 – Safety double glazed unit. U value of window 1.2 | £392 | £420 | £426 | £438 | £452 | £452 | £500 | £575 | £648 | £582 | £608 | £642 | £704 | £648 | £770 |
| PTP-V/C O1* | 01 – Obscure double glazed unit. U value of window 1.2 | £365 | £390 | £400 | £410 | £425 | £425 | £470 | £535 | £605 | £540 | £565 | £600 | £650 | £600 | £720 |

*WINDOW WITH THE OBSCURE GLASS



Conservation windows in L-shape, Anglesey, Wales



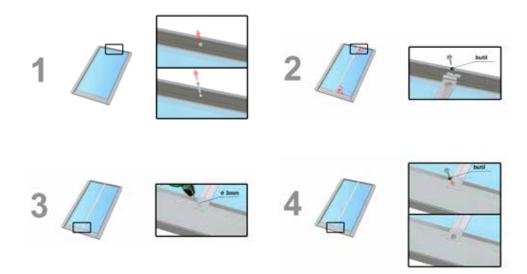
Conservation windows in L-shape, Anglesey, Wales



Pioneers Museum, Rochdale, Lancashire, sandstone slate over 25mm thick used

PLANT ON MULLION BARS-

Plant on Mullion Bars can be ordered t suit standard colour windows (RAL 7022) and create a conservation style window using a standard product. Supplied for on site fitting the bar comes complete with fixing screws. Available to suit all standard height windows, this method requires the frames to be drilled on site so care must be taken when fitting. PLEASE CONTACT FAKRO TECHNICAL DEPARTMENT FOR FURTHER DETAILS





| TOP HUNG | AND PIVOT WIND | ows - | WHITE & | & NATUR | RAL PIN | E / WHIT | E PU-CO | DATED P | PINE | | | | | | | |
|-------------------------|---|---------------------|---------------------|----------------------|---------------------|----------------------|---------------------|----------------------|----------------|----------------|----------------------|----------------|-----------------------|-----------------|----------------|----------------|
| | windows external dimensions [cm] effective glazing area [m ²] | 55x78 0.21 01 | 55x98 0.29 02 | 55x118 0.37 16 | 66х98 0.38 03 | 66x118 0.47 04 | 78x98 0.47 05 | 78x118 0.59 06 | 78x140 0.72 | 78x160 0.82 | 94x118 0.75 08 | 94x140 0.92 | 114x118 0.95 10 | 114x140 1,16 | 134x98 0.92 | 94x160 1.07 |
| FPP-V/C P2 preSelect | size symbol P2 – Safety double glazed unit. Toughened outer pane. Laminated inner pane. | N/A | £520 | £530 | £530 | £558 | £540 | £585 | £630 | £730 | £645 | £695 | £695 | £760 | £710 | £795 |
| FPP-V/C P5 preSelect | U value of window 1.2 P5 – Safety triple glazed unit.Toughened outer pane. Laminated inner pane. | N/A | £748 | £760 | £780 | £800 | £778 | £838 | £905 | N/A | £930 | £998 | N/A | N/A | N/A | N/A |
| PPP-V/C P2 preSelect | U value of window 0.97 P2 - Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.2 | N/A | £718 | £726 | £726 | £770 | £770 | £822 | £895 | N/A | £956 | £1020 | £1020 | N/A | N/A | N/A |
| FPU-V/C P2 preSelect | P2 – Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.2 | N/A | £582 | £588 | £588 | £604 | £604 | £630 | £676 | £842 | £697 | £749 | £754 | £822 | £770 | £858 |
| FPU-V/C P5 preSelect | P5 – Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 0.97 | N/A | £878 | £884 | £884 | £915 | £910 | £956 | £1024 | N/A | £1055 | £1 128 | N/A | N/A | N/A | N/A |







| THERMA | LLY EFFICIENT ROOF | WINDO |)WS - N/ | ATURAL | PINE | | | | | | | | | | | |
|--------------------|---|-------|----------|--------|--------|--------|-------|--------|--------|--------|--------|--------|---------|---------|--------|--------|
| | windows external dimensions [cm] | 55x78 | 55x98 | 55x118 | 66x98 | 66x118 | 78x98 | 78x118 | 78x140 | 78x160 | 94x118 | 94x140 | 114x118 | 114x140 | 134x98 | 94x160 |
| | effective glazing area [m²] | 0.21 | 0.29 | 0.37 | 0.38 | 0.47 | 0.47 | 0.59 | 0.72 | 0.82 | 0.75 | 0.92 | 0.95 | 1.16 | 0.92 | 1.07 |
| | size symbol | 01 | 02 | 16 | 03 | 04 | 05 | 06 | 07 | 13 | 08 | 09 | 10 | 11 | 12 | 80 |
| FTT/C U6 | U6 - High energy efficient triple glazed unit. U value of window 0.80 | N/A | £635 | £662 | £662 | £704 | £710 | £798 | £878 | £1020 | £918 | £946 | £953 | £1074 | £974 | £1 154 |
| FTT/C U8 Thermo | U8 - Passive quadruple glazed unit. U value of window 0.58* | N/A | £1075 | £1 135 | £1 140 | £1 215 | £1220 | £1 350 | £1490 | £1745 | £1560 | £1600 | £1 610 | £1 820 | £1660 | £1980 |

*WINDOW U VALUE WHEN INSTALLED WITH THERMAL FLASHING CONSERVATION FTT U 8 WINDOWS DO NOT INCLUDE THE FLASHING KIT- PLEASE SELECT A SUITABLE FLASHING KIT

| THERMAL | LY EFFICIENT ROOF | WINDC | ows - wi | HITE PU | -COATE | D PINE | | | | | | | | | | |
|------------|---|-------|----------|---------|--------|--------|-------|--------|--------|--------|--------|--------|---------|---------|--------|--------|
| | windows external dimensions [cm] | 55x78 | 55x98 | 55x118 | 66x98 | 66x118 | 78x98 | 78x118 | 78x140 | 78x160 | 94x118 | 94x140 | 114x118 | 114x140 | 134x98 | 94x160 |
| | effective glazing area [m²] | 0.21 | 0.29 | 0.37 | 0.38 | 0.47 | 0.47 | 0.59 | 0.72 | 0.82 | 0.75 | 0.92 | 0.95 | 1.16 | 0.92 | 1.07 |
| | size symbol | 01 | 02 | 16 | 03 | 04 | 05 | 06 | 07 | 13 | 08 | 09 | 10 | 11 | 12 | 80 |
| FTT/U/C U6 | U6 – High energy efficient triple glazed unit. U value of window 0.80 | N/A | £696 | £734 | £734 | £775 | £780 | £878 | £972 | £1134 | £1020 | £1034 | £1060 | £1206 | £1082 | £1300 |
| | U8 – Passive quadruple | | | | | | | | | | | | | | | |

*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



Barn conversion, Baschurch, Shropshire, with the use of ELJ/C Flashing Kit



| HIGH PIVO | T WINDOWS - NATURAI | . PINE | | | | | | | |
|-------------------------------------|--|--------|--------|--------|--------|--------|--------|--------|--------|
| | windows external dimensions [cm] | 78x140 | 78x160 | 78x180 | 78x206 | 94x140 | 94x160 | 94x180 | 94x206 |
| | effective glazing area [m²] | 0.73 | 0.85 | 0.96 | 1.62 | 0.92 | 1.07 | 1.22 | 1.42 |
| | size symbol | 07 | 13 | 40 | 42 | 09 | 80 | 41 | 43 |
| FYP-V/C P2 proSky Single sash | P2 – Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.2 | £610 | £665 | £720 | £785 | £672 | £752 | £820 | £895 |

AVAILABLE IN WHITE POLYURETHANE - PRICES ON APPLICATION

| HIGH PIVOT | WINDOWS - NATURAI | L PINE | | | | | BAL | CONYWINDOW | | |
|--|--|--------|--------|--------|--------|--------|--------|--|-------|----------------|
| | windows external dimensions [cm] | 78x186 | 78x206 | 78x235 | 94x186 | 94x206 | 94x235 | windows external dimensions [cm] effective glazing area [m²] | 0.92 | 94x255 1.67 |
| | effective glazing area [m ²] | 1.05 | 1.19 | 1.39 | 1.29 | 1.46 | 1.71 | | | |
| | size symbol | CA | CB | CC | DA | DB | DC | size symbol | | |
| FDY-V/C P2 Duet proSky Twin sash | P2 – Safety double glazed unit. Toughened outer pane. Laminated inner pane. U value of window 1.2 | £858 | £952 | £1040 | £936 | £1030 | £1 182 | V/C P2 glazed unit. U value of window 1.5 | £2856 | £2856 |

AVAILABLE IN WHITE POLYURETHANE - PRICES ON APPLICATION

Please note that the FGH-V/C Balcony window is supplied complete with flashing BUT PLEASE EN-SURE you stipulate the type of roof covering PLEASE STATE THE FLASHING KIT TYPE REQUIRED AT TIME OF ORDER

| L-SHAPED | COMBINATION WINI | DOW | | | | | | | | | | | | | |
|--|---|------------|------------|------------|------------|------------|-----------------------|------------|------------|------------|-----------------------|--------------------|------------|-----------------------|-----------------------|
| | windows external dimensions [cm] | 78x60 | 78x75 | 78x95 | 78x115 | 78x137 | 94x60 | 94x75 | 94x95 | 94x115 | 114x60 | 114x75 | 114x95 | 114x115 | 134x60 |
| | effective glazing area [m ²] size symbol | 0.25 33 | 0.33 81 | 0.45 82 | 0.57 83 | 0.71 84 | ^{0.31} 34 | 0.42 85 | 0.58 86 | 0.73 87 | ^{0.40} 35 | 0.5 3 89 | 0.73 90 | ^{0.92} 91 | ^{0.48} 36 |
| BDL/C P2 BDR/C P2 Tilt and turn opening | P2 – Safety double glazed unit. U value of window 1.3 | £700 | £760 | £825 | £918 | £1007 | N/A | £818 | £899 | £987 | N/A | N/A | £975 | £1066 | N/A |
| BVP/C P2 Tilt opening | P2 – Safety double glazed unit. U value of window 1.3 | £470 | £495 | £522 | £585 | £645 | £522 | £550 | £580 | £638 | £545 | £580 | £600 | £600 | £588 |
| BXP/C P2 Non-opening | P2 – Safety double glazed unit. U value of window 1.2 | £402 | £420 | £440 | £490 | £535 | £440 | £460 | £480 | £525 | £500 | £535 | £585 | £630 | £560 |

TRIPLE GLAZED OPTIONS ARE AVAILBE TO ORDER - PLEASE CONTACT FAKRO SALES OFFICE FOR FURTHER DETAILS



Correct choice and installation of the roof window flashing is essential. FAKRO not only supplies flashings to enable roof windows to be installed with any type of roof covering but enables windows to be fitted at 3 key depths. This is particularly valuable with the installation of conservation roof windows which invariably need to sit low within the roof line.

 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 3 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 No other roof tile manufacturer offers a choice of 3 depths

NOTE: WINDOWS DO NOT SIT FLUSH OR BELOW THE ROOFLINE.



STANDARD FLASHINGS ALLOW WINDOWS TO BE INSTALLED IN THE MOST POPULAR TYPE OF ROOF COVERINGS

| FLASHINGS FOR CEN | ITRE PIV | OT WIN | DOW, TO | PHUNG | AND PI | OT WIN | IDOWS | | | | | | | | |
|--|----------|--------|---------|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|--------|--------|
| windows 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, ELV, EPV | £50 | £51 | £53 | £55 | £57 | £57 | £60 | £64 | £79 | £68 | £71 | £71 | £79 | £75 | £74 |
| EHN-A | £57 | £58 | £60 | £65 | £65 | £65 | £68 | £73 | £82 | £77 | £81 | £81 | £88 | £86 | £84 |
| EZJ-A*, ELJ* , EPJ Recessed Style | £67 | £69 | £72 | £75 | £78 | £78 | £81 | £87 | £102 | £90 | £97 | £96 | £110 | £102 | £100 |
| EZV-A/C, ELV/C, EPV/C | £70 | £76 | £82 | £82 | £84 | £84 | £86 | £87 | £105 | £90 | £96 | £102 | £105 | £104 | £112 |
| EHN-A/C | £84 | £90 | £94 | £94 | £97 | £95 | £101 | £101 | £120 | £104 | £108 | £114 | £120 | £117 | £123 |
| EZJ-A/C*, ELJ/C*, EPJ/C* Recessed Style | £93 | £99 | £105 | £105 | £111 | £111 | £113 | £113 | £137 | £122 | £129 | £134 | £138 | £142 | £148 |
| EFW (Kerb) | £260 | £262 | £270 | £273 | £275 | £279 | £306 | £319 | £378 | £319 | £330 | £334 | £356 | £370 | £400 |
| EHV-AT**, EPV-T *** | £86 | £97 | £102 | £102 | £104 | £104 | £109 | £114 | £129 | £118 | £123 | £123 | £129 | £124 | £147 |
| ELV-T***, ESV-T*** | £80 | £90 | £95 | £95 | £97 | £97 | £102 | £107 | £122 | £110 | £116 | £116 | £122 | £116 | £138 |
| EZA ESA & EHA | £180 | £185 | £195 | £195 | £206 | £202 | £212 | £220 | £262 | £226 | £242 | £242 | £262 | £242 | £274 |

** FLASHING FOR FLAT, PROFILED AND HIGH PROFILED ROOF COVERINGS (UP TO 90MM PROFILE DEPTH) *** AVAILABLE TO INDIVIDUAL ORDER



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



ELV, ELJ, ELV-T For natural and man-made slates up to 10mm thickness



EFW For flat roof window system. Includes flashing and up-stand. It can be fitted to roofs with a pitch of up to 15°



EZV-A, EZJ-A For profiled roof coverings up to 45mm depth



EPV, EPV-T For slates and concrete / slate plain tiles up to 16mm thickness



EZA Lifts windows out of the roofline by 10 degrees



EHN-A For deeply profiled roof coverings up to 90mm depth



EE For flat roofing materials and metal roofs



Kingspan Header + EKB Profile Set header section for membrane roofs. Price on application



EHV-AT Thermo Provides thermal insulation above the surface of the battens



EZV-A/C, ELV/C, EPV/C, EHN-A/C, EZJ-A/C, ELJ/C

Conservation flashings are available for each of the preceding roof covering types.





FLASHINGS FOR WINDOWS WITH RAISED AXIS OF ROTATION (PROSKY)

| windows dimensions [cm] | 78x140 | 78x160 | 78x180 | 78x206 | 94x140 | 94x160 | 94x180 | 94x206 |
|----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| size symbol | 07 | 13 | 40 | 42 | 09 | 80 | 41 | 43 |
| ELV EZV-A | £64 | £79 | £95 | £107 | £71 | £74 | £110 | £122 |
| EHN-A | £73 | £82 | £105 | £118 | £81 | £84 | £120 | £134 |
| ELV/C* EZV-A/C* | £87 | £105 | £122 | £138 | £96 | £112 | £142 | £158 |
| EHN-A/C* | £101 | £120 | £134 | £152 | £108 | £123 | £154 | £174 |

FLASHINGS FOR WINDOWS WITH RAISED AXIS OF ROTATION (DUET PROSKY)

| windows dimensions [cm] size symbol | 78x186 CA | 78x206 CB | 78x235 | 94x186 DA | 94x206 DB | 94x235 DC |
|---|--------------|--------------|--------|--------------|--------------|--------------|
| ELV EZV-A | £97 | £109 | £120 | £115 | £123 | £136 |
| EHN-A | £109 | £120 | £131 | £126 | £137 | £150 |
| ELV/C* EZV-A/C* | £125 | £140 | £154 | £148 | £160 | £176 |
| EHN-A/C* | £137 | £154 | £166 | £160 | £177 | £192 |

2

*CONSERVATION STYLE.



FLASHING FOR JOINING WINDOWS IN COMBINATIONS

A SELECTION OF THE MOST POPULAR COMBINATION FLASHING KITS FOR SLATE & INTERLOCKING TILES UP TO 45mm PROFILE ARE SHOWN BELOW - OTHERS AVAILABLE ON REQUEST.

| | | | | | | | | | | | | | | | _ |
|---|-------|-------|--------|-------|--------|-------|--------|--------|--------|--------|--------|---------|---------|--------|--------|
| windows 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 |
| 2 Piece Combinations <u>B2/1. B1/2</u> EZV-A. ELV. EPV | £125 | £128 | £133 | £138 | £143 | £143 | £150 | £160 | £198 | £170 | £178 | £178 | £198 | £188 | £185 |
| EZV-A/C. ELV/C. EPV/C | £175 | £190 | £205 | £205 | £210 | £210 | £215 | £218 | £263 | £225 | £240 | £255 | £263 | £260 | £280 |
| 3 Piece Combinations <u>B3/1. B1/3</u> EZV-A. ELV. EPV | £188 | £191 | £199 | £206 | £214 | £214 | £225 | £240 | £297 | £255 | £266 | £266 | £296 | £281 | £278 |
| EZV-A/C. ELV/C. EPV/C | £263 | £285 | £308 | £308 | £315 | £315 | £323 | £326 | £394 | £338 | £360 | £383 | £394 | £390 | £420 |
| 4 Piece Combinations <u>B2/2</u> EZV-A. ELV. EPV | £250 | £255 | £265 | £275 | £285 | £285 | £300 | £320 | £395 | £340 | £355 | £355 | £395 | £375 | £370 |
| EZV-A/C. ELV/C. EPV/C | £350 | £380 | £410 | £410 | £420 | £420 | £430 | £435 | £525 | £450 | £480 | £510 | £525 | £520 | £560 |
| 6 Piece Combinations <u>B3/2. B2/3</u> EZV-A. ELV. EPV | £375 | £383 | £398 | £413 | £428 | £428 | £450 | £480 | £593 | £510 | £533 | £533 | £593 | £563 | £555 |
| EZV-A/C. ELV/C. EPV/C | £525 | £570 | £615 | £615 | £630 | £630 | £645 | £653 | £788 | £675 | £720 | £765 | £788 | £780 | £840 |

A SELECTION OF THE MOST POPULAR COMBINATION FLASHING KITS FOR HIGH PROFILE INTERLOCKING TILES UP TO 90mm ARE SHOWN BELOW - OTHERS AVAILABLE ON REQUEST.

| windows 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 |
| 2 Piece Combinations <u>B2/1. B1/2</u> EHN-A | £143 | £145 | £150 | £163 | £163 | £163 | £170 | £183 | £205 | £193 | £203 | £203 | £220 | £215 | £210 |
| EHN-A/C | £205 | £218 | £228 | £228 | £235 | £230 | £245 | £245 | £300 | £253 | £263 | £278 | £293 | £285 | £298 |
| 3 Piece Combinations B <u>3/1, B1/3</u> EHN-A | £214 | £218 | £225 | £244 | £244 | £244 | £255 | £274 | £308 | £289 | £304 | £304 | £330 | £323 | £315 |
| EHN-A/C | £308 | £327 | £342 | £342 | £353 | £345 | £368 | £368 | £450 | £379 | £394 | £417 | £439 | £428 | £447 |
| 4 Piece Combinations <u>B2/2</u> EHN-A | £285 | £290 | £300 | £325 | £325 | £325 | £340 | £365 | £410 | £385 | £405 | £405 | £440 | £430 | £420 |
| EHN-A/C | £410 | £435 | £455 | £455 | £470 | £460 | £490 | £490 | £600 | £505 | £525 | £555 | £585 | £570 | £595 |
| 6 Piece Combinations <u>B3/2, B2/3</u> EHN-A | £428 | £435 | £450 | £488 | £488 | £488 | £510 | £548 | £615 | £578 | £608 | £608 | £660 | £645 | £630 |
| EHN-A/C | £615 | £653 | £683 | £683 | £705 | £690 | £735 | £735 | £900 | £758 | £788 | £833 | £878 | £855 | £893 |

*ELV, ELV/C - SLATE AND FLAT TILES IN CONSERVATION STYLE. EZV-A, EZV-A/C - PROFILED TILES AND METAL ROOF UP TO 45 MM DEPTH. EPV, EPV/C - PLAIN TILES, SHINGLES. 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



Flashing systems are ready made flashing combinations for joining windows in the groups: horizontally, vertically, and in a block. The distance between the windows joined horizontally and vertically is normally 10cm. There are seven modules in the FAKRO combination system to cater for any layout you may require.

ROOF WINDOW 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. Material swatches can be seen in greater detail in the FAKRO Roof Window Accessories brochure which can be downloaded from **www.fakro.co.uk**. In addition, you can request a colour swatch by phoning our Sales Office on 01283 554755 and order using our online shop.



ability to control the amount of incoming light to the room
control the direction of light entering by changing the angle of the slats





 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



2



You will see 3 price groups: Price Group I consists predominantly of plain colours while those in Groups II and III offer a wide range of patterns. With external awning blinds, Group II products are also made using a closer density fabric which greatly reduces the amount of light which can pass through it.

Note: When looking at blinds on any website other than www.fakro.co.uk we recommend that you check with us as some show our logo but DO NOT sell genuine FAKRO products.



- very good protection from sunlight
- the possibility of darkening the room
- possibility to lock the blind in any position
- partial protection from solar heat
- Also available for flat roof windows type C and F. With manual control (ARF/D) and wireless Z wave electric control (ARF/D Z-Wave). See page 60.



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A children'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 make your children able to invite to the room their favourite heroes.

DREAMWORKS DRAGONS © 2017 DREAMWORKS ANIMATION LLC. ALL RIGHTS RESERVED. DREAMWORKS KUNG FU PANDA © 2017 DREAMWORKS ANIMATION LLC. ALL RIGHTS RESERVED. DREAMWORKS TROLLS © 2017 DREAMWORKS ANIMATION LLC. ALL RIGHTS RESERVED. DREAMWORKS PENGUINS OF MADAGASCAR © 2017 DREAMWORKS ANIMATION LLC. ALL RIGHTS RESERVED.

UNDER APPROVAL PROCESS. PLEASE CONSULT YOUR FAKRO REPRESENTATIVE FOR AVAILABLE MOTIFS, SIZES AND ORDER PROCESSING TIME. PHOTO PRESENTED FOR ILLUSTRATIVE PURPOSES ONLY. PATTERNS AND COLOURS MAY DIFFER FROM THE ACTUAL PRODUCT.





softness and diffusion of light possibility to lock the blind in any position

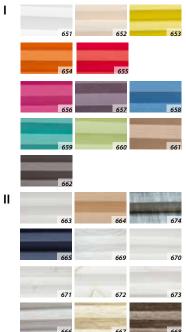
top-down system- ease of opera tion by the use of the upper and lower bar

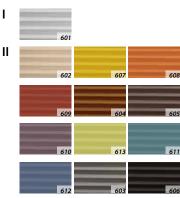
L



protection against insects

- minimum shading of the room
- can be installed with other internal and external accessories





External roller shutter ARZ

- effective protection against burdensome heat
- reducing heat loss in winter
- darkening the room
- makes break-in attempts more difficult







8 times more efficient against room overheating

optimal protection against room overheating effective shading of the interior while providing visibility

- convenient, the awning blind can cover the window for a whole summer without the need to roll it up and down every day
- Also available for flat roof windows type C with Z wave control (AMZ/C Z-Wave) and type F (AMZ/F Solar) powered by solar batteries. See page 71.



EXTERNAL ACCESSORIES

2



INTERNAL ACCESSORIES

| windows ovtornal | | | | | | | | | | | | | | | |
|---|-------|-------|--------|-------|--------|-------|--------|--------|--------|--------|--------|---------|---------|--------|--------|
| 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 |
| AJP-Z-Wave I Venetian Group I (Electric) | - | - | £272 | £272 | £275 | £275 | £277 | £280 | £285 | £282 | £285 | £288 | £292 | £285 | £292 |
| AJP-Z-Wave II Venetian Group II (Electric) | - | | £282 | £282 | £285 | £285 | £285 | £292 | £295 | £292 | £297 | £297 | £308 | £295 | £303 |
| AJP I Venetian Group I | £64 | £66 | £69 | £69 | £74 | £71 | £76 | £81 | £83 | £82 | £86 | £89 | £94 | £86 | £120 |
| AJP II Venetian | £72 | £80 | £83 | £83 | £88 | £83 | £88 | £93 | £101 | £99 | £104 | £104 | £122 | £104 | £127 |
| ARS I Roller Group I | £40 | £40 | £43 | £43 | £44 | £46 | £47 | £48 | £50 | £49 | £50 | £57 | £59 | £57 | £59 |
| ARS II Roller Group II | £64 | £65 | £77 | £78 | £79 | £81 | £82 | £83 | £89 | £87 | £89 | £93 | £95 | £91 | £93 |
| ARP I Roller Group I | £62 | £62 | £75 | £75 | £75 | £78 | £78 | £78 | - | £86 | £86 | £93 | £98 | £93 | - |
| ARP II Roller Group II | £67 | £67 | £81 | £81 | £81 | £84 | £84 | £84 | - | £93 | £93 | £101 | £109 | £101 | - |
| ARP-Z-Wave I Roller Group I (Electric) | £201 | £204 | £206 | £206 | £211 | £211 | £216 | £219 | - | £221 | £224 | £226 | £232 | £226 | |
| ARP-Z-Wave II Roller Group II (Electric) | £213 | £216 | £218 | £218 | £221 | £221 | £226 | £228 | - | £228 | £236 | £236 | £241 | £236 | - |
| ARF-Z-Wave I Blackout Group I (Electric) | £203 | £205 | £208 | £208 | £213 | £213 | £218 | £221 | £226 | £223 | £226 | £228 | £234 | £228 | |
| ARF-Z-Wave II Blackout Group II (Electric) | £210 | £212 | £215 | £215 | £218 | £218 | £222 | £225 | £234 | £226 | £232 | £234 | £238 | £234 | |
| ARF-Z-Wave III Blackout Group III (Electric) | £218 | £221 | £223 | £223 | £226 | £226 | £234 | £236 | £241 | £236 | £241 | £244 | £246 | £244 | |
| ARF I Blackout | £70 | £71 | £86 | £86 | £86 | £88 | £91 | £94 | £103 | £103 | £103 | £106 | £120 | £106 | £120 |
| ARF II Blackout Group II | £81 | £81 | £93 | £93 | £93 | £96 | £99 | £103 | £111 | £111 | £114 | £117 | £130 | £117 | £130 |
| ARF III Blackout | £86 | £86 | £101 | £101 | £101 | £103 | £106 | £112 | £125 | £120 | £125 | £127 | £142 | £127 | £142 |
| APS I Pleated | £57 | £59 | £63 | £63 | £65 | £68 | £70 | £75 | £81 | £78 | £81 | £83 | £88 | £86 | £109 |
| APS II Pleated Group II | £62 | £65 | £70 | £70 | £73 | £76 | £78 | £86 | £96 | £91 | £96 | £99 | £104 | £101 | £128 |
| APF I Pleated Group I | £95 | £95 | £117 | £117 | £117 | £120 | £124 | £132 | £140 | £140 | £140 | £145 | £162 | £145 | £162 |
| APF II Pleated Group II | £105 | £105 | £125 | £125 | £125 | £130 | £134 | £140 | £155 | £150 | £155 | £158 | £178 | £158 | £178 |
| AMS 200 Insect screen | £100 | £102 | £105 | £105 | £105 | £112 | £112 | £112 | | £118 | £118 | £118 | £118 | £123 | |
| AMS 240 Insect screen | - | - | - | £107 | £107 | £115 | £115 | £115 | £115 | £121 | £121 | £136 | £136 | - | £121 |
| | | | | | | | | | | | | | | | |

NOTE: ONLY INTERNAL ACCESSORIES AVAILABLE FOR FYP, FDY ROOF WINDOWS. MORE INFORMATION AVAILABLE UPON REQUEST. ELECTRIC BLINDS NEED AN ELECTRICAL KIT PURCHASED AS WELL ON A MANUAL WINDOW. NOT ALL INTERNAL AND EXTERNAL BLINDS FOR FTT U6 AND FTTU8 WINDOWS ARE AVAIL-ABLE MORE INFORMATION UPON REQUEST. NOTE: BLINDS FOR FTT US ROOF WINDOWS MUST BE ORDERED SPECIFICALLY FOR THOSE WINDOWS AS STANDARD BLINDS WILL NOT FIT.

EXTERNAL ACCESSORIES

| ANNUNC DUNDE FOR DIVISTIMUND SINC | / | AND TOD HUNG AND DUROT WINDOWS (FD DD DDECELECT®) |
|-----------------------------------|---|--|
| | |) AND TOP HUNG AND PIVOT WINDOWS (FP, PP PRESELECT®) |
| | (| |

| windows external dimensions [cm] size symbol | 55x78 01 | 55x98 02 | 55x118 16 | 66x98 03 | 66x118 04 | ^{78x98} | 78x118 06 | 78x140 07 | 78x160 13 | 94x118 08 | 94x140 09 | 114x118 10 | 114x140 11 | 134x98 12 | 94x160 80 |
|--|-------------|-------------|--------------|-------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|----------------------|----------------------|--------------|--------------|
| AMZ I Group I | £57 | £57 | £60 | £60 | £68 | £70 | £70 | £73 | £99 | £78 | £86 | £88 | £96 | £94 | £104 |
| AMZ II Group II | £62 | £62 | £67 | £67 | £75 | £78 | £78 | £86 | £109 | £91 | £96 | £102 | £109 | £104 | £120 |
| AMZ SOLAR Group I | £500 | £505 | £514 | £514 | £525 | £525 | £530 | £538 | £548 | £538 | £548 | £550 | £560 | £552 | £566 |
| AMZ SOLAR Group II | £525 | £530 | £540 | £540 | £552 | £552 | £556 | £565 | £575 | £565 | £575 | £578 | £588 | £580 | £594 |

EXTERNAL ROLLER SHUTTER: ARZ-H FOR PIVOT WINDOWS (FT), ARZ-E FOR PIVOT WINDOWS (FT, PT) AND TOP HUNG AND PIVOT WINDOWS (FP, PP PRESELECT*)

| windows external dimensions [cm] | 55x78 | 55x98 02 | 55x118 | 66x98 | 66x118 | 78x98 | 78x118 06 | 78x140 | 78x160 13 | 94x118 | 94x140 | 114x118 | 114x140 | 134x98 | 94x160 |
|-------------------------------------|-------|--------------------|--------|-------|--------|-------|--------------|--------|--------------|--------|--------|---------|---------|--------|--------|
| size symbol | 01 | 02 | 16 | 03 | 04 | 05 | 06 | 07 | 13 | 08 | 09 | 10 | | 12 | 80 |
| ARZ-H | £294 | £300 | £308 | £308 | £321 | £317 | £331 | £331 | £355 | £344 | £358 | £361 | £374 | £365 | £380 |
| *ARZ Z-Wave (No Switch) | £331 | £338 | £346 | £346 | £362 | £356 | £374 | £384 | £400 | £390 | £403 | £406 | £420 | £410 | £425 |
| *ARZ - Solar | £613 | £624 | £634 | £634 | £650 | £650 | £660 | £674 | N/A | £682 | £692 | £698 | £716 | £698 | N/A |

* RETAINING 20 CM DISTANCE BETWEEN THE WINDOWS IN VERTICAL POSITION

ACCESSORIES FOR FLAT ROOF WINDOWS

INTERNAL - BLINDS

- roller blind protects against harsh sunlight and provides a decorative element.
- Provides a pleasant shaded interior on even the sunniest day.
- With the use of guides, the blind can be positioned at any point giving gradual reduction of incoming light, until the blackout.
- Available in two versions of control:



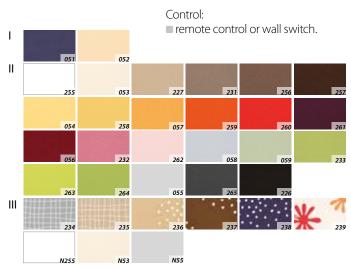
Gwave

ARF/D

Control: manual.



■ in wireless Z-Wave system, powered for the mains.



THE MATERIAL SAMPLES PRINTED CAN DIFFER IN COLOUR FROM THE ACTUAL PRODUCT.

EXTERNAL- AWNING BLINDS

- Awning blind absorbs solar radiation before it reaches the glass and emits heat outside, thus on sunny days protects interior against burdensome heat.
- Awning blind- up to 8 times more effective protection against heat when compared with blackout blind.



for roof windows type F, comfortable use, automatic operation of the awning blind (the photovoltaic panel works as a sensor, which reacts to solar radiation In bright sunlight the awning blind unrolls automatically and rolls up during the cloudy weather), powered by solar batteries.

Control:

automatic operation or remote control.



AMZ/C Z-Wave

- for roof windows type C,
- in wireless Z-Wave system,
- an innovative system enables installation of the awning blind below the window's dome,
- powered for the mains.

Control:

■remote control or wall switch.



THE MATERIAL SAMPLES PRINTED CAN DIFFER IN COLOUR FROM THE ACTUAL PRODUCT.

| | 60x60 | 60x90 | 70x70 | 80x80 | 90x90 | 90x120 | 100x100 | 120x120 | 140x140 | 100x150 | 120x220 |
|--|-------|-------|-------|-------|-------|--------|---------|---------|---------|---------|---------|
| symbol of size | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 |
| ARF/D I | £70 | £70 | £75 | £80 | £86 | £94 | £94 | £96 | £115 | £102 | N/A |
| ARF/D II | £78 | £78 | £83 | £88 | £94 | £105 | £105 | £107 | £118 | £107 | N/A |
| ARF/D III | £88 | £88 | £96 | £104 | £106 | £120 | £120 | £124 | £136 | £124 | N/A |
| ARF/D I Z-Wave | £262 | £262 | £268 | £270 | £278 | £282 | £282 | £305 | N/A | N/A | N/A |
| ARF/D II Z-Wave | £270 | £270 | £275 | £278 | £285 | £290 | £290 | £312 | N/A | N/A | N/A |
| ARF/D III Z-Wave | £275 | £275 | £284 | £286 | £294 | £295 | £295 | £320 | N/A | N/A | N/A |
| AMZ/F I Solar Flat Roof Group I | £590 | £590 | £610 | £610 | £625 | £635 | £625 | £650 | £820 | £760 | £965 |
| AMZ/F II Solar Flat Roof Group II | £620 | £620 | £640 | £640 | £660 | £670 | £660 | £685 | £865 | £805 | £1 020 |
| AMZ/C I Z-Wave Flat Roof Group I Electric | £302 | £310 | £315 | £320 | £336 | £615 | £345 | £660 | £685 | £650 | £760 |
| AMZ/C II Z-Wave Flat Roof Group II Electric | £318 | £325 | £335 | £338 | £355 | £645 | £365 | £690 | £720 | £680 | £795 |

WHEN INSTALLING THE AMZ/C Z-WAVE ON DXC AND DMC WINDOWS, POWER SUPPLY AND REMOTE CONTROL HAVE TO BE PURCHASED ADDITIONALLY.



Z-WAVE ELECTRICAL CONTROL ELEMENTS



ZWS 12 / ZWS 230

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



ZWK 10

Z-Wave wall keyboard control can operate several receivers separately.



ZWP 10

Z-Wave remote control, can operate several receivers separately or in groups.



ZWG1/ZWG3

Z-Wave touch keyboard can operate one receiver separately or in groups. Available in triple version.



ZWL 1

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



ZZ 60 / ZZ 60h

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



ZWMA 1

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



ZRD

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



ZWMA

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).



ZWD

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



ZWMP

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



ZFD

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

£80

ACCESSORIES FOR OPENING WINDOWS







ACCESSORIES FOR OPENING WINDOWS

£37

ZBH Handle with lock

£35

£32

ZBB ZBL Window restrictor Window lock

£32

£32

£40

ZSP

£27

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



ZSD

Universal telescopic rod for opening DMC, DMF flat roof windows as well as internal blinds intended for these windows

INSTALLATION ACCESSORIES

FAKRO installation accessories guarantee quick and easy connection between the roof window and the roof construction. Using XDP insulating set and XDS air-tight flashing ensures the complete protection of a fitted roof window. The installation accessories reduce the risk of thermal bridging and guarantee the proper draining of any moisture around the FAKRO window. Using original installation accessories will allow the proper use of the windows for many years.



XDK (**XDP**+**XDS**) **XDP** set of insulating collars insulation set



XDS air tight collar

) lii

XLW lining



XWT insulation band



XSP, XSW duet slats

INSTALLATION ACCESSORIES

| 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 | 80 | 09 | 10 | 11 | 12 | 80 |
| XDK | £52 | £52 | £52 | £52 | £52 | £52 | £52 | £57 | £62 | £57 | £57 | £57 | £57 | £57 | £62 |
| XDP | £30 | £30 | £30 | £30 | £30 | £30 | £30 | £33 | £35 | £33 | £33 | £33 | £33 | £33 | £35 |
| XDS | £31 | £31 | £31 | £31 | £31 | £31 | £31 | £34 | £36 | £34 | £34 | £34 | £34 | £34 | £36 |
| XLW-F 40 & XLW-P 40 | £106 | £113 | £115 | £115 | £123 | £123 | £128 | £135 | £150 | £135 | £140 | £140 | £145 | £145 | £155 |
| XLW-F 30 & XLW-P 30 | £90 | £93 | £95 | £95 | £100 | £100 | £105 | £110 | £125 | £110 | £115 | £115 | £120 | £120 | £130 |
| хwт | £32 | £32 | £32 | £32 | £32 | £32 | £32 | £37 | £40 | £37 | £37 | £37 | £37 | £37 | £40 |
| XSP, XSW (Horizontal) | £16 | £16 | £16 | £16 | £16 | £19 | £19 | £19 | £19 | £21 | £21 | £24 | £24 | £26 | £21 |



OTHER PRODUCTS

SOLAR PANELS

FAKRO solar panels can be installed either independently or together with FAKRO roof windows in visually appealing combinations using standard flashings. Solar panels are becoming increasingly popular as an eco-friendly way of harnessing the sun's energy to heat water.

| FAKRO VENTED SOLAR THERMAL SYSTEM KITS | | | | | | | | | |
|--|------------|------------|------------|------------|--|--|--|--|--|
| external dimensions [cm] | 114x206 | 114x140 | 114x118 | 78x140 | | | | | |
| combinations | | | | | | | | | |
| solar system kit | B3/1 44 | B3/1 11 | B3/1 10 | B3/1 07 | | | | | |
| Collector area (m ²) | 7.08 | 4.83 | 4.05 | 3.27 | | | | | |
| Absorption area (m ²) | 6.21 | 4.08 | 3.39 | 2.73 | | | | | |
| | £4820 | £4 180 | £4050 | £3670 | | | | | |

INCLUDES: COLLECTORS, FLASHING, SEALS, CYLINDER, PUMP, CONTROL UNIT, EXPANSION TANK, GLYCOL, MIXING VALVE, FLOW & RETURN PIPES (10M), COLLECTOR CONNECTOR OTHER SOLAR SYSTEMS AVAILABLE

| FAKRO VENTED R | OOF ONLY SOA | LR THERMAL | SYSTEM KITS (| SKW) |
|-----------------------------------|---------------|---------------------|---------------------|---------------|
| external dimensions [cm] | 114x206 | 114x140 | 114x118 | 78x140 |
| | | | | |
| combinations | B3/1 660ZH | B4/1 660ZK | B4/1 660ZN | B5/1 660ZT |
| combinations | | | | |
| size symbol | 44 | B2/2 660ZL 11 | B2/2 660ZP 10 | 07 |
| Collector area (m ²) | 7.08 | 6.44 | 5.40 | 5.45 |
| Absorption area (m ²) | 6.21 | 5.44 | 4.52 | 4.55 |
| | £2270 | £2.290 | £2040 | £2490 |

INCLUDES: COLLECTORS, FLASHING, SEALS, FLOW & RETURN PIPES (1.8M), COLLECTOR CONNECTOR POSSIBLE INSTALLATION RANGE 300 - 900 OTHER ROOF ONLY SOLAR SYSTEMS AVAILABLE

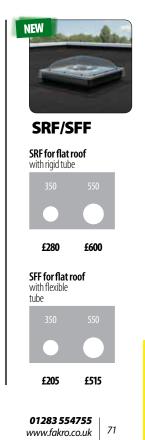
LIGHT TUNNELS

In order to supply interior with natural light where there are no opportunities to install roof or vertical windows, an effective solution can be a light tunnel. Dimly lit interiors without access to the natural light can become light and comfortable to use. There are a few types of light tunnels available: SRT with rigid light transmitting tube and SLT with flexible light transmitting tube. Flashings enable installation of light tunnels in nearly every roof covering and even in flat roofs.

Note: SLT Plus Light tunnel includes 300cm of tubing, flashing and a light, bulb not included.

Please specify which flashing (slate or tile) when ordering. SRT Plus Light tunnel includes the tunnel, flashing and a light, bulb not included. Please specify which flashing (slate or tile) when ordering.





£570

SR with standard flashing

£370

£385

£545

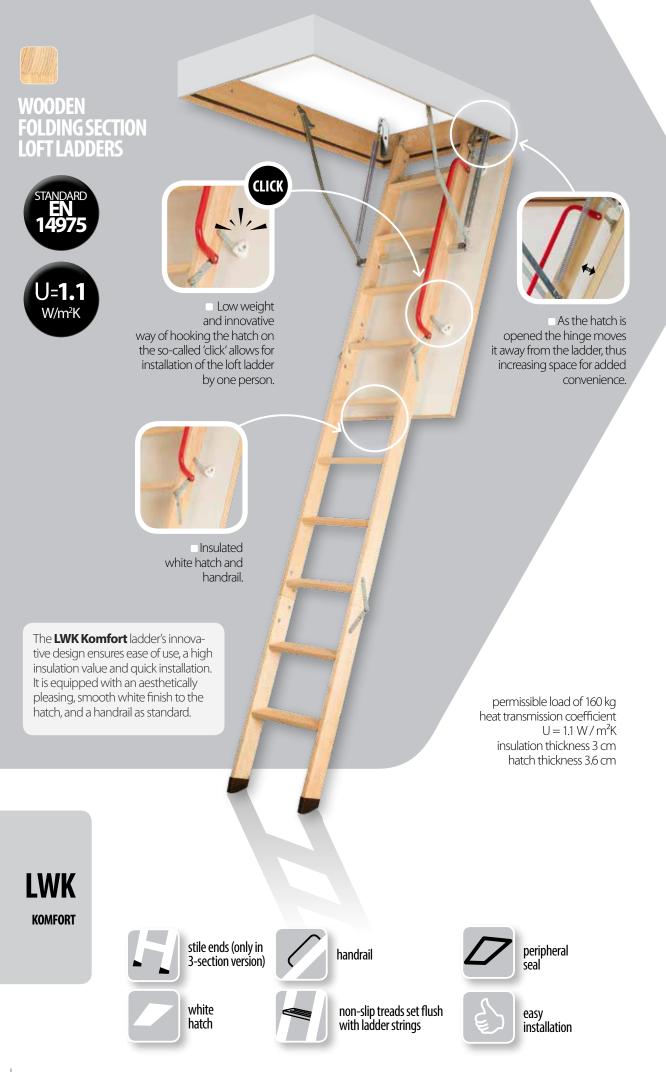
£275

illumination

£290

SR-L with additional

and standard flashing





LWK Komfort LOFT LADDER DIMENSIONS

| Ceiling opening dimensions [cm] | AxB | 55x111 | 60x94 | 60x100 | 60x111 | 60x120 | 60x130 | 70x94 | 70x100 | 70x111 | 70x120 | 70x130 | 70x140 | 60x130 | 60x140 | 70x130 | 70x140 | |
|--------------------------------------|-----|------------|-----------|-----------|------------|------------|------------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|--|
| Room height [cm] | H | | 280 | | | | | | | | | | 305 | | | | | |
| Box external dimensions [cm] | | 53 x 109.4 | 58 x 92.4 | 58 x 98.4 | 58 x 109.4 | 58 x 118.4 | 58 x 128.4 | 68 x 92.4 | 68 x 98.4 | 68 x 109.4 | 68 x 118.4 | 68 x 128.4 | 68 x 138.4 | 58 x 128.4 | 58 x 138.4 | 68 x 128.4 | 68 x 138.4 | |
| Internal box dimensions [cm] | | 49 x 105 | 54x88 | 54x94 | 54 x 105 | 54 x 114 | 54 x 124 | 64x88 | 64x94 | 64 x 105 | 64x114 | 64x124 | 64 x 134 | 54 x 124 | 54x134 | 64 x 124 | 64x134 | |
| Folded ladder height [cm] | K | 27 | 3 | 5 | | 27 | | 3 | 35 | | | | 2 | 27 | | | | |
| Swing space [cm] | R | 153 | 1 | 28 | 153 | 1 | 56 | 1. | 18 | 153 | 156 | | | 175 | | | | |
| Distance after ladder unfolding [cm] | C | 113 | 1 | 14 | 113 | 1 | 20 | 1 | 4 | 113 | | 120 | | 135 | | | | |
| Hatch retraction after opening [cm] | Р | | | | | | | | | 4 | | | | | | | | |
| Box height [cm] | | | | | | | | | 1 | 4 | | | | | | | | |
| Number of segments | | 3 | | 4 | | 3 | | | ļ | | | | | 3 | | | | |
| LADDER PARAMETERS | | | | | | | | | | | | | | | | | | |
| Tread length [cm] | E | 30 | | | | | | | | 34 | | | | | | | | |
| Tread width [cm] | | | 8 | | | | | | | | | | | | | | | |
| Distance between treads [cm] | | | | | | | | | 2 | 5 | | | | | | | | |
| Tread thickness [cm] | | | 2 | | | | | | | | | | | | | | | |

LOFT LADDER DIMENSIONS

| Commercial sizes [cm] | | 55x111 | 60x94 | 60x100 | 60x111 | 60x120 | 60x130 | 70x94 | 70x100 | 70x111 | 70x120 | 70x130 | 70x140 | 60x130 | 60x140 | 70x130 | 70x140 |
|-----------------------|---|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| Room height [cm] | Η | | 280 305 | | | | | | | | | | | | | | |
| Code | | 863821 | 863807 | 863806 | 863804 | 863801 | 863802 | 863817 | 863816 | 863814 | 863811 | 863812 | 863813 | 863851 | 863852 | 863853 | 863854 |

SEE: COMPLETE GUIDE TO LOFT LEADERS 2017



LOFT LADDERS

FAKRO 3 and 4-part folding loft ladders have been designed to combine exceptional quality and value with ease of installation and use. Timber ladders are made exclusively using the same close-grain, pine as that used for FAKRO roof windows and supplied either with an integral 36mm insulated hatch (U-value of 1.1 W/m²K) or, with the **LTK Energy**, a 66mm hatch (U-value 0.68W/m²K). Pine ladders have an edge-sealed pine frame and an adjustable spring mechanism which makes opening and closing easy and locks the ladder in position when open.

Hatches are of white or beige HDF while treads, which have grooves cut into them for added safety, are fitted to the legs using dovetail joints. Up to 13 standard hatch options are available, with non-standard sizes available for the **LWS Smart** and **LWK Komfort**.

The LMF folding metal loft ladder offers an exceptional fire rating of 120 minutes. Specially designed hinges and springs ensure that it can be opened and closed quickly while providing a load bearing capability of up to 200kg. Installed in the same manner as our pine ladders, the LMF is fitted with a steel supporting frame and fully adjustable legs. 13cm wide anti-slip treads offer improved safety while an additional step at the top provides greater convenience when exiting the loft.





Range of optional accessories available. See our loft ladder brochure for details



Loft balustrade LXB-U

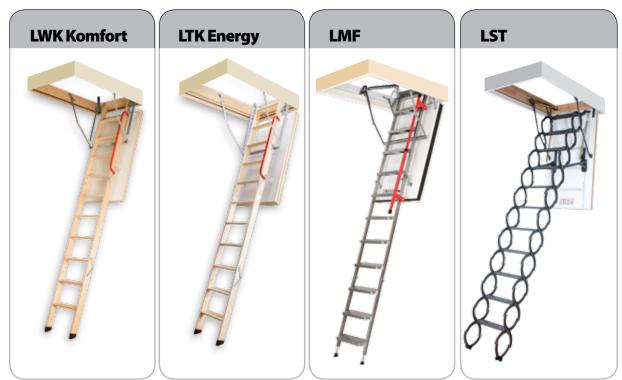




L-shaped combination door DWK, DWT, DWF



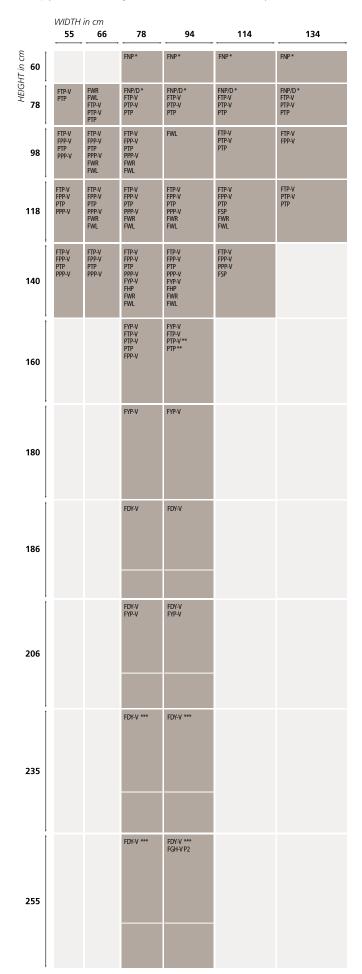
Finishing lining slats LXL-P/W, LXL-PVC

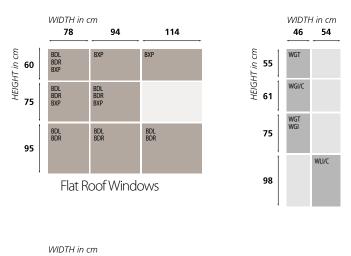


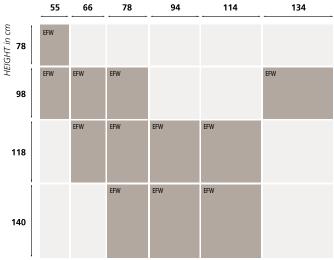


WINDOW SIZE GUIDE

Simply check the height and width dimensions for your chosen window, and see the choice of products available based on the U3 glazing unit.







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 SI Available T Prices on R |
|---|
| * NON-OP ** PTP-V P2 WITH PI *** AVAILAB |

ZES NOT STATED IN THE PRICE LIST O INDIVIDUAL ORDERS. EOUEST.

PENING WINDOWS, PRICES ON REQUEST 2, PTP P2 RECOMMENDED FOR THE ROOFS ITCH FROM 25 DEGREE

BLE TO INDIVIDUAL ORDERS. PRICES ON REQUEST







Fakro GB Ltd Fakro House Astron Business Park Hearthcote Road Swadlincote DE11 9DW telephone : 01283 554755 fax : 01283 224545 www. fakro.co.uk e-mail: sales@fakrogb.com