



#### Dear Sirs,

Innovation is the driving force behind the development of FAKRO. By taking up the challenges set by architects, FAKRO realizes a wide range of special projects, thus encouraging clients to fulfil their visions. Complementing our individual orders and production, non-standard solutions are implemented on a daily basis. Interesting ideas inspire us to create new FAKRO products.

We strive to meet the expectations of our clients and willing co-operate with architects. By presenting innovative applications of FAKRO products, designers of such projects help us to understand those needs and requirements.

| Buildings utilising FAKRO non-standard products are erected all over the world. We have decided to present a few examples of interesting projects. We do hope that the design solutions presented here will be an intriguing discovery for you. Perhaps, they will inspire you to create timeless realizations of your own. |
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| FAKRO inspires!   |
| FAKRO Team  |



### VOSSEBORG APARTMENTS

The vertically combined FAKRO roof windows ensured a remarkable appearance to the body of the building and provided abundant natural light, making the interiors bright and spacious.



FAIRYTALE HOUSE IN GRONINGEN

The house has one of the largest FAKRO roof windows at 66 cm x 290 cm. The landscape surrounding the building can be experienced throughout the interior.



#### UNIQUE, BLACK ROOF WINDOWS IN RESIDENTIAL "HET GROENE HART" **HOUSE IN WEERT**

This charming house in Weert is very distinctive due to the series of special black frame FAKRO roof windows that have been installed.



**APARTMENTS IN** 

In the old cherry orchard in the village of Leidsche Rijn this complex of three buildings comprises 30 apartments with 282 FAKRO roof windows.



**HOTEL & GASTERIJ DE ROODE SCHUUR** 

The 4-star De Roode Schuur hotel attracts attention with its extraordinary design and a thatched roof. The hotel offers 38 rooms, each of which is equipped with at least one large FAKRO roof window.

#### **VOSSEBORG APARTMENTS**

Project: Multi-family residential building

Location: Hillegom

Design: Thijs Asselbergs

The design of the Vosseborg Apartments is an exceptional one. It introduced unique elements into the body of the building which required special solutions for the roof structure. Two opposite façades were covered with ceramic tiles over their entire surface. FAKRO roof windows were installed on the façades and combined with each other vertically along the entire height of the building. This allowed the designer to provide an abundance of the natural light to the interior. The application of vertical glazing gives a magnificent view of the surrounding landscape.

The vertically combined FAKRO roof windows ensured a remarkable appearance to the body of the building and brought in ample natural light, making the interiors bright and spacious.







#### **FAIRYTALE HOUSE IN GRONINGEN**

Project: Single-family residential building

Location: Groningen
Design: Edin Buitenhuis

FAKRO manufactured one of the biggest roof windows at 66cm x 290cm for this unique country house located in picturesque scenery.

With this solution the interior of the building became very vivid. The window combines the interior of the building with the external environment, thus revealing to residents stunning views of its location. As envisioned by the designer, the landscape surrounding the building is experienced throughout the interior.

The FAKRO window is mounted in a pointed roof. It was a major challenge to manufacture and install the window in such a roof and a special flashing was produced to fit it. Thanks to this absolutely non-standard solution, the window matched exactly with the roofing and installation process did not deviate from the standard installation of FAKRO roof windows.

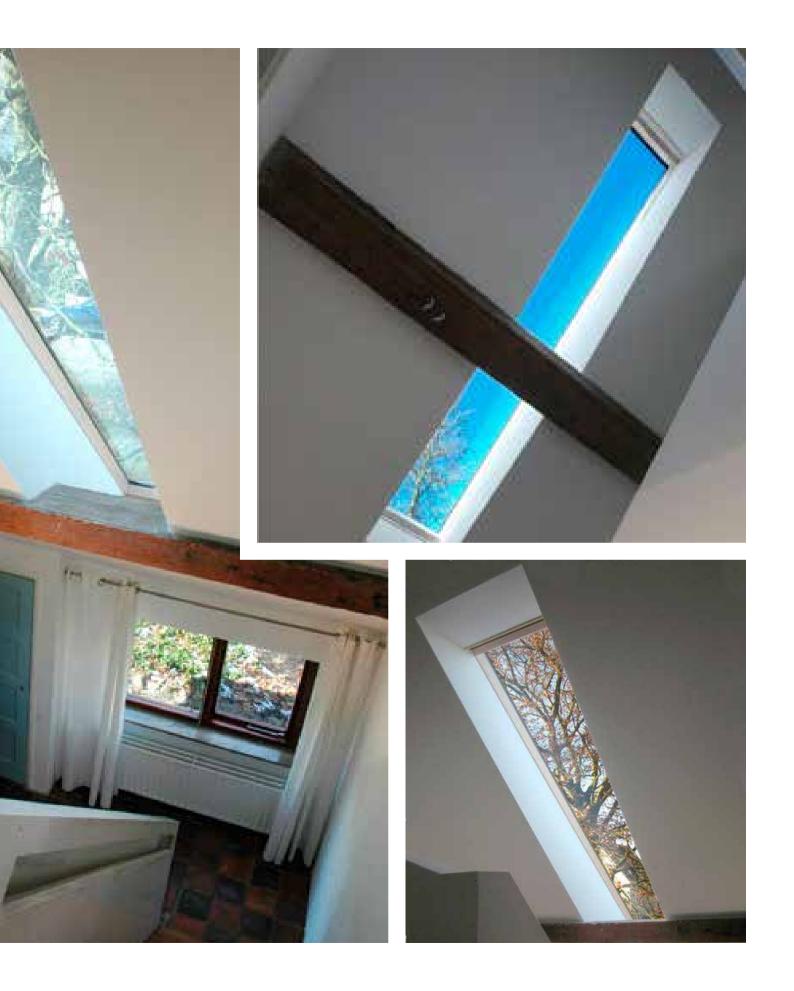
FAKRO products installed in the building:

- FNP L3 roof window size: 66 x 290 cm
- EHV flashing size: 66 x 290
- standard FAKRO roof windows

Photographs of the project – Merit Buitenhuis.







### UNIQUE, BLACK ROOF WINDOWS IN RESIDENTIAL HOUSE IN WEERT

Project: Single-family residential building

Location: Weert

This charming house in Weert is very distinctive due to the special series of FAKRO windows installed. The client requested all roof windows frames to be black from both inner and outer aspects. To meet the expectations of the client, FAKRO created ten unique high pivot windows all finished in black RAL 9005. Thanks to such solution, windows perfectly harmonized with the rest of the house.

It was necessary to manufacture non-standard flashings because of the application of the thatched roofing. Special ETV-B flashings for the thatch were created in order to install roof windows in this unusual roof covering. Furthermore, P2 anti-burglary glazing units were specified to increase safety and security.

FAKRO products installed in the building:

- FYP-V high pivot roof window; black RAL 9005 on both sides,
- specially designed ETV-B flashings,
- P2 anti-burglary glazing unit,
- XRP black auxiliary rafter.







### APARTMENTS IN "HET GROENE HART"

Project: Multi-family residential building

Location: Leidsche Rijn
Design: Lars Zwart

In the old cherry orchard in the village of Leidsche Rijn a complex of three buildings comprising 30 apartments was constructed. The buildings are designed for residential purposes, however part of the complex is used as an exhibition space for artists. The buildings were designed by architect Lars Zwart of Op ten Noort Blijdenstein.

The architecture of buildings references traditional, rural buildings. The interiors are spacious and bright with daylight introduced by 282 FAKRO roof windows. The roof windows are distinguished with the ventilation system located in the upper part of the frame. This allows for a larger glazing area, so that the maximum amount of daylight is brought into the room. It was one of the fundamental objectives of the architect in the course of the design development.

In order to achieve the aims of the designer it was necessary to apply non-standard flashings. Six combination systems in various RAL colours were specially produced in order to allow combinations of 12 FAKRO roof windows into one module.

The creation of a single, large module introduced the optimum amount of daylight thereby providing an incredible illuminated effect.







#### HOTEL & GASTERIJ DE ROODE SCHUUR

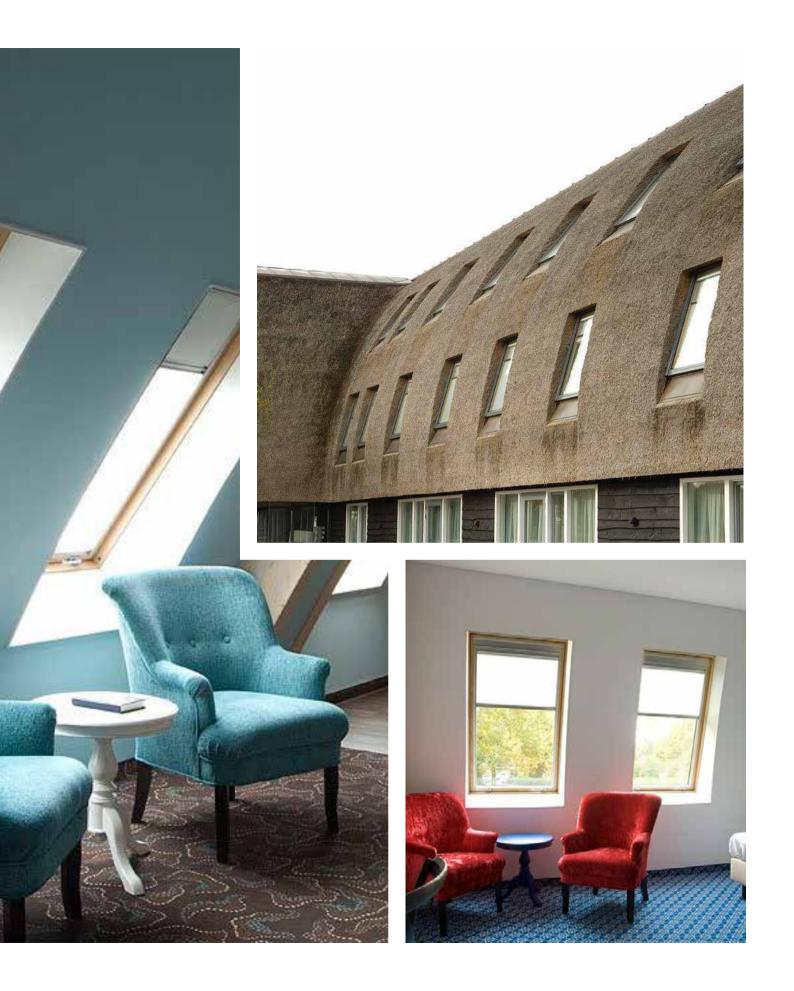
Project: Hotel Location: Nijkerk

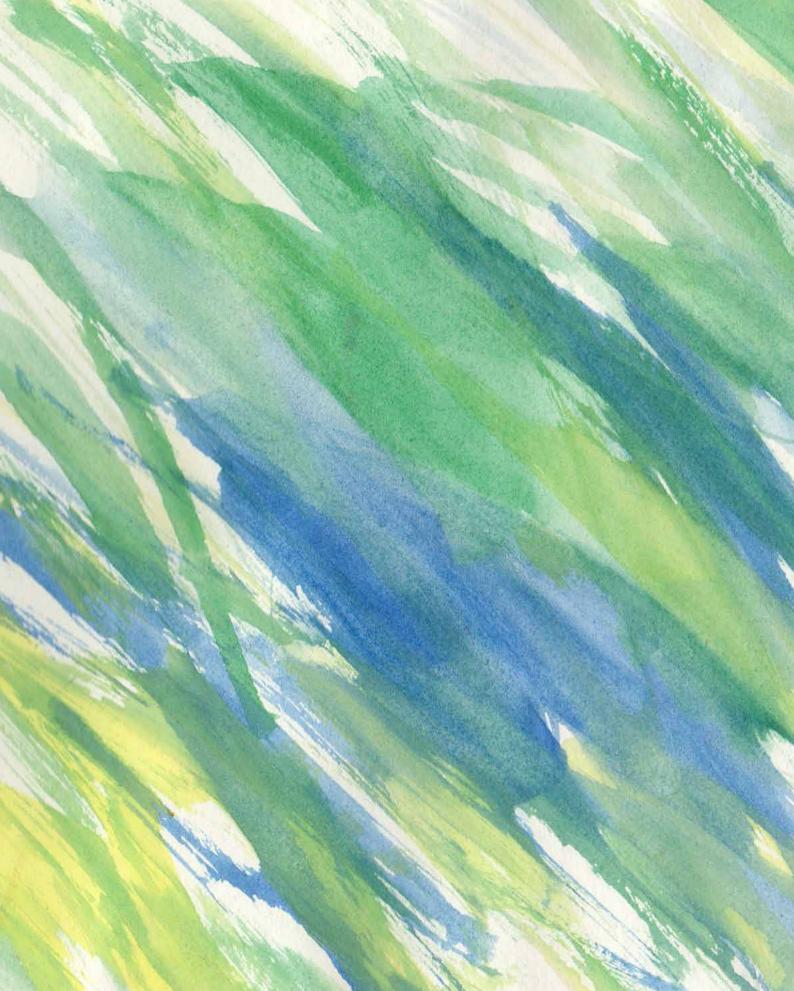
The 4-star *De Roode Schuur* hotel attracts attention with its extraordinary design and a thatched roof. The hotel offers 38 rooms, each equipped with at least one large FAKRO roof window which have been designed in such a way that rooms are provided with optimum amount of natural light to create a pleasing climate for visiting guests.

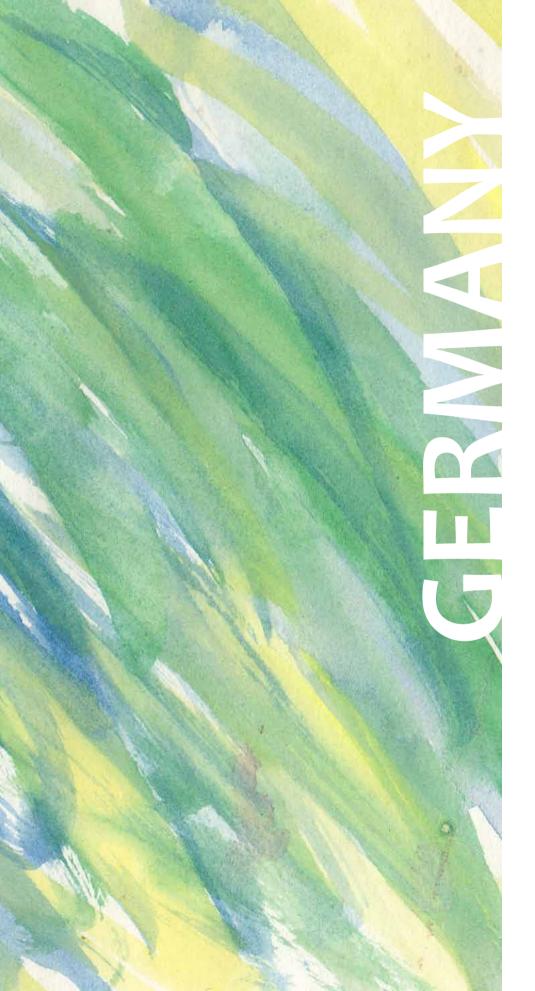
Due to the thatched roofing, specially designed flashings in appropriately selected RAL colours have been used to combine windows with the roof covering, thus ensuring a beautiful and aesthetic finish of the entire roof. The *De Roode Schuur* hotel was opened in the autumn of 2009.













**JOSEPH PSCHORR HAUS** 

This modern building was built on the site of a large beer-house and brewery whose façades were decorated with metal and glass, while the roof comprises an impressive 120 FAKRO roof windows.

### **GERMANY**

#### JOSEPH PSCHORR HAUS

Project: Residential & Commercial building

Location: Munich

Design: Kuehn Malvezzi

The newly erected Joseph Pschorr Haus located in the centre of Munich between Neuhauser Straße, Eisemannstraße and Altheimer Eck was designed by architect Kuehn Malvezzi of Berlin. The building is 50 metres high, has 5 floors and an underground garage with over 200 parking spaces. On the site of the present building there was formerly a large beer-house and brewery named "Pschorr", from which the present building gets its name thus combining tradition and modernity. The clients opted for a high-quality finish of the building. Shiny façades are made of glass and metal. 120 pivot and top hung and pivot FAKRO windows featuring double-chamber glazing units are installed in the building. Windows are combined with the roof surface by means of specially designed flashings made of the material provided by the client.















### DESIGN STUDIO PL ARCHITECTS

A contemporary style design studio is in the converted attic of an old tenement house in Poznan. This realization won the first prize in a contest organized by Foorni portal in the "attic" category.



### THE OPOLE MUSEUM OF RURAL ARCHITECTURE

The building is distinguished with a modern and simple design and is situated in The Opole Museum of Rural Architecture, the only openair museum located in the Opole Voivodeship



#### "CROOKED HOUSE" IN ZELEZNIKOWA, NEAR NOWY SACZ

A single-family house in Zeleznikowa, near Nowy Sacz, located in a picturesque mountainous region and titled by the designer "Variation on the mountains".



**PASSIVE CHURCH** 

The church on Rownia Szaflarska in Nowy Targ is the first of its kind in Europe built with the use of passive construction technology. The church is equipped with FAKRO energy-efficient windows.

#### **DESIGN STUDIO PL ARCHITECTS**

Project: Design studio

Location: Poznan

Design: Katarzyna Cynka, Bartłomiej Bajon, Marcin Kozierowski,

PL Architects

PL Architects was established in 2004 in Poznan and designs buildings across Poland. Their projects are distinguished with simplicity, modernity and a minimalist creative approach. Buildings are functional and built with attention to details with the form of buildings using simple solids. PL Architects projects include: single-family buildings, public utility buildings, residential buildings and warehouses with all designs created individually. This is especially important in single-family houses which are uniquely designed with an absence of uniformity.

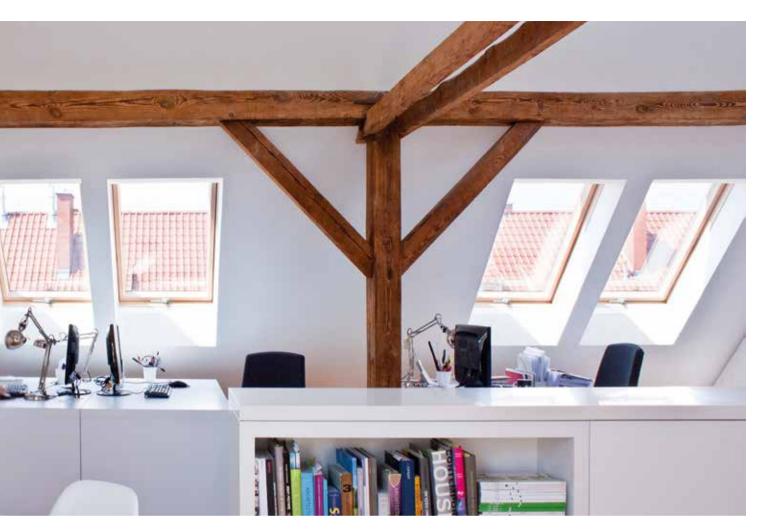
Interior design is also a speciality of the studio. Therefore, it is not surprising that the practise office impresses with its interior. The Architects adapted an old and unused attic of a tenement house in Poznan and 17 FAKRO roof windows were installed in the loft providing a beautiful light and airy workspace.

This realization won the first prize in the contest organized by Foorni portal in the "attic" category.













#### THE OPOLE MUSEUM OF RURAL ARCHITECTURE

Project: Museum Location: Opole

Design: Architect Ewa Oględzka, Biprok

The Opole Museum of Rural Architecture is the only open-air museum located in the Opole Voivodeship, and only one of four such museums located within the historical boundaries of Silesia. During its almost 50 years of existence the Museum has amassed a rich collection of historic wooden architecture from the Opole Silesia region.

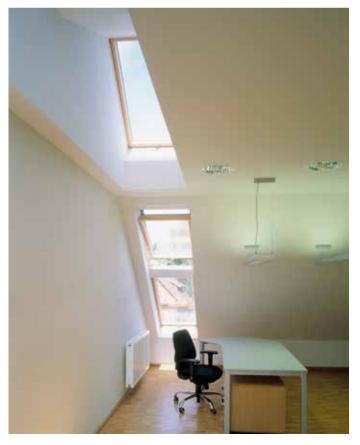
The new administrative and reception building was erected in 2007. The building is characterized by a modern and simple design. To illuminate rooms located in the loft, 29 FAKRO roof windows and access roof light were mounted. Windows were installed in horizontal and vertical combinations. Part of the roof is covered with titanium-zinc sheet metal formed into standing seams and then complemented with oak panelling. The installation of the FAKRO windows required the design and manufacture of special flashings.











### "CROOKED HOUSE" IN ZELEZNIKOWA, NEAR NOWY SACZ

Project: Single-family residential building Location: Zeleznikowa, near Nowy Sacz

Design: Jakub Potoczek

This single-family house in Zeleznikowa, near Nowy Sacz was designed by architect Jakub Potoczek for his own use. It is located in a picture sque mountainous region and has been titled by the designer "Variation on the mountains".

The designer stated that: "The whole body of the building refers to solid rocks. It is a twisted cube stuck into the abstract forms of the sandstone. The roof which is a combination of rusty sheet metal and stainless steel resembles gentle slopes of the Beskidy Mountains and sharp ridges of the Tatra Mountains. The house expresses the need to draw from the tradition, while at the same time it's a denial and unwillingness to design another building with a gable roof".

The interior of the building is filled with large amount of the natural light. Completely non-standard roof windows have been installed in the building, which are skilfully incorporated into the roof structure. Each of these windows feature different shape: rhomboids, triangles, trapezoids. The non-standard windows shapes are mounted in sophisticated systems of combinations. The designer came up with ambitious challenge that was accepted by FAKRO. Project planning was completed in two weeks and the FAKRO windows were assembled in just one month.











#### **PASSIVE CHURCH**

Project: Catholic Church

Location: Nowy Targ

Design: Tomasz Piszczek, Marcin Stelmach, Passive Architecture

Design Studio

The church on Rownia Szarlarska in Nowy Targ is the first of its kind object in Europe to be built with passive construction technology. The church is equipped with FAKRO energy-efficient roof windows.

ICommissioned by parish priest Jan Karlak this innovative and energy-efficient church was designed by Tomasz Piszczek and Marcin Stelmach of the Passive Architecture Design Studio, a practise specialising in passive construction. The design of the building is influenced by the historical styles of the region and by applying passive construction technological solutions shows respect for the Earth's natural resources by producing economic and environmental savings.

The church is an extremely energy-efficient passive building with a minimal consumption of energy for heating purposes. The main body of the church was shaped in such a way to minimise heat loss through external partitions and to ensure maximum passive solar gains in the winter season and at the same time to protect the interior against overheating in the summer. The building is the effect of combining local cultural traditions and current trends in the design of architectural structures The reference point in the search for the design inspiration turned out to be traditional wooden churches in which the shape of the roof and eaves results from the obvious need to protect the building against the adverse effects of the wind, rain and snow.

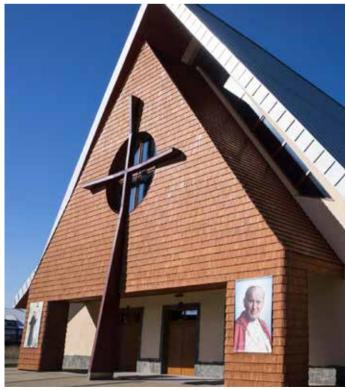
"The passive church for active worshippers" is a new quality naturally suited to the needs of modern society and a vision of a twenty-first century Church with which people will be eager to identify.

















**OCKENDON ACADEMY** 

Two timber school buildings of sustainable construction with FAKRO Electro roof windows.



LOG CABIN HOMES IN EAGLE BRAE

Holiday homes project constructed with red Canadian cedar logs and green roofing using wild grasses. Specified with FAKRO roof windows and bespoke flashings.

# GREAT BRITAIN

#### **OCKENDON ACADEMY**

Project: School Location: Essex

Design: Architect Simon Lawrence, Cabinco Ltd

Two new timber buildings at Ockendon Academy have seen use of 53 FTP-V Z-Wave windows along with ARF Z-Wave roller shutters. 16 were installed in the English block while 37 were used on the larger 'Ockendon Studio School', a self-contained facility for year 12 and 13 students. Cabinco which specialises in eco building and the construction of sustainable school buildings in particular was the main contractor for both projects.

Designs focussed heavily on the provision of large, open plan teaching areas. As a result, it was particularly important to maximise availability of natural light and with both buildings having low pitch roofs the roof windows play a crucial role. Specific technical issues were addressed including a requirement for wall operated electrical operation throughout.

Simon Lawrence, Director of Cabinco said that he chose FAKRO products due to their great quality and good technical support.













# GREAT BRITAIN

#### LOG CABIN HOMES IN EAGLE BRAE

Project: Holiday homes
Location: Scottish Highlands

Design: Architect Steven Caudry, Maxwell & Co of Inverness

Houses constructed with red Canadian cedar logs.

FAKRO supplied centre pivot and top hung / pivot roof windows for luxury self-catering log cabins at Eagle Brae in the Highlands of Scotland. Windows were installed individually and in horizontal combinations. A key element of the project was the requirement for green roofing using wild grasses. The roof windows were fitted into waterproofed timber boxes raised above the vegetation. Bespoke flashings to suit the unique requirements of the project were also specified.

Project architect Steven Caudry commented:

"We appreciated FAKRO's flexibility to meet our requirements, allowing a far neater end result than could have been achieved using standard flashings".

31 FAKRO roof windows were installed in log cabin homes, including:

- FTP-V pivot windows
- FPP-V top hung and pivot windows











# FAKRO FAKRO INSPIRES