

The logo for 'architectum' features a small red icon of three vertical bars of increasing height to the left of the word 'architectum', which is written in a large, white, sans-serif font. The background of the entire page is a photograph of a modern building with a complex, multi-tiered roof covered in grey and white tiles, set against a clear blue sky.

# architectum

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International magazine for roof architecture

[www.architectum.com](http://www.architectum.com)

**Expert roof renovation**

**New installation and renovation at NRW.BANK in Munster**

Munster, Germany

**A multistage project while school is in session**

**New eco-friendly building while school is on**

St-Martin d'Hères, France

**A sense of life**

**Harmony without straight lines**

Baisogala, Lithuania



# Editorial

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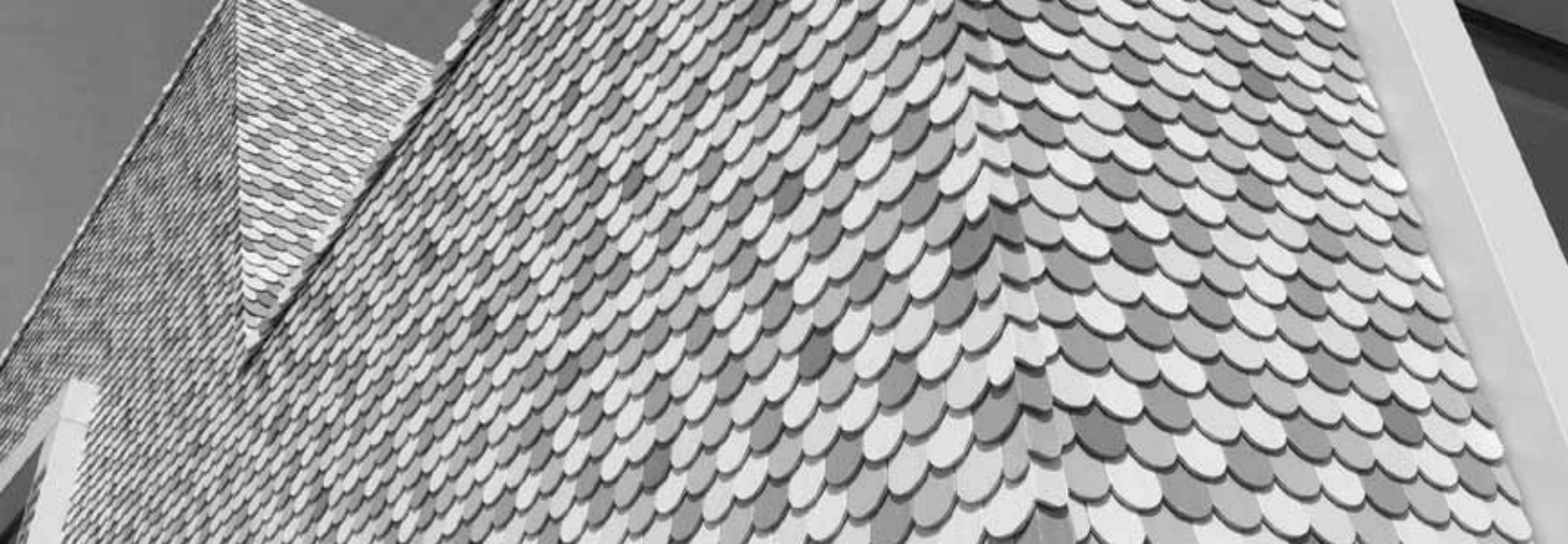
### Dear Roofing Experts,

Sometimes even we, who work with clay roof tiles on a daily basis, are amazed at how creatively architects and building professionals are able to apply this product. Reclaimed clay tiles for the interior, as seen on page 5, are something you don't see every day. Projects in this issue showcase the broad range of application of a building material that has succeeded like no other in keeping its relevance over the centuries. Aside from our ongoing dialogue with architects, roofers, builders and installers we also look forward to feedback from discerning clients. Please let us know of your comments, suggestions and requests by emailing us at [koramic@wienerberger.com](mailto:koramic@wienerberger.com).

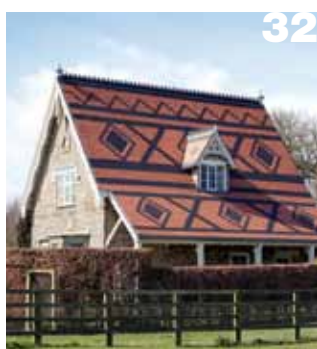
Kind regards,  
Franz Kolnerberger







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## News Membership IFD New associate member of the International Federation for the Roofing Trade

Since early 2011 Wienerberger AG and its subsidiaries KORAMIC, ZZ-Wancor, Sandtoft, Bogen und Jungmeier, are official associate members of the IFD – the International Federation for the Roofing Trade e.V.

**Franz Kolnerberger**, Head of Product Group Management Roof at Wienerberger AG, commented on the membership, "We are happy about our admittance to the International Federation for the Roofing Trade. As Europe's largest producer of roof tiles and expert in construction materials, we will take an active role in workgroups, workshops and training, while utilising our know-how for the trade association. At the same time we hope that the membership will bring us into even more direct contact with roofers. The experience of these professionals will allow us to develop more tailor-made, easy to use products and process solutions in the future."

The IFD is the world's largest association working to further the interests of the roofing trade. It developed as a joint, strong association during the 50's with the goal to facilitate a comprehensive experience exchange within the industry. Today numerous national associations, international companies, manufacturers and trade associations are members. The IFD organises international workshops, conferences and is involved in setting technical norms. An emphasis lies in the areas of technology and research, as well as the education and training of young professionals, for instance through the annual World Championships for Young Roofers.

"We see the roof as one of the key elements of the building envelope, especially when dealing with system solutions for energy efficient construction. It is our goal to carry on this holistic approach. Together with the experts from IDF we can build a strong future for the roofing trade," Franz Kolnerberger concludes.

Wienerberger is Europe's number 1 for clay roof tiles and provides sustainable and energy efficient system solutions for roofs.

## Wind suction protection New Koramic service online



Screenshots [www.sturmfix.de](http://www.sturmfix.de)

The guidelines "Wind loads on tile-covered roofs" of the Zentralverband des Deutschen Dachdeckerhandwerks (Central Association of German Roofers – ZVDH) took effect in March of 2011. The requirements relating to protection from wind suction have been made much more stringent. The parameters for determining bracing are now much more complex.

Wienerberger has therefore developed a new website to address just this topic. At [www.sturmfix.de](http://www.sturmfix.de), tradesmen and architects can find out everything they need to know about protecting against wind suction.

As an additional service, you can use a Koramic calculation tool that allows you to quickly and easily calculate the required degree of bracing in specific instances. Roofs with Koramic tiles and the associated Sturmfix installation system perform particularly well: they frequently require less bracing and are therefore more economical. Have a look at the new website, you are sure to find something of interest.



## Ceramic inspiration

### From a slaughterhouse to a cultural district



Madrid's city slaughterhouse was built in 1910 in the southern region of the city. The ensemble of 20 pavilion-like buildings consisting of slaughterhouses, refrigeration buildings and warehouses along with the adjacent administrative building are a prime example of the industrial architecture of the early 20th century. After the facility shut down, the slaughterhouse area experienced a rebirth as a laboratory for modern art.

The small warehouse 8B was assigned a new purpose as an administrative centre including offices and a multifunctional event hall. The renovation included an acoustic redesign and thermal insulation appropriate for contemporary needs. The Spanish architect **Arturo Franco** was responsible for the architectural reinterpretation. The

roof underwent the most obvious change. The old tiles were removed and put into storage, the underlying framework was restored and provided with insulation, and the tiles were then reinstalled in a creative pattern reflective of their history.

The roof tiles from the neighbouring building were put to a new use in the interior. A ceramic grid structure that lets light through was created to divide the individual functional areas from each other, yet at the same time retaining a visual orientation. And in the end, this is what restores the historical reference. The architects wanted the project to be an intellectual, cultural and ethical experience. According to Arturo Franco, it should not be misinterpreted as a social or political statement. The design reflects this intention.



# European materials, Chinese inspiration

## A combination of Chinese and western architecture

**Located northwest of Beijing's centre, in a desirable residential neighbourhood, the imperial Summer Palace represents a never-seen-before luxury property project as it combines the influences of two different cultures. Chinese and western architecture meet in perfect symbiosis.**

All 91 grand houses which make up the Imperial Summer Palace are well designed by Mr. Feng Wenfei, using traditional Chinese features whilst integrating simplistic characteristics and technology from western sources in a genial way in order to reflect the image of an emerging China.

**Meeting of orient and occident.** Mr. Feng Wenfei managed to create buildings with spiritual significance, based on ceremonies of the Confucian theory and philosophical thinking of Western civilization; but they also use advanced material and techniques to construct buildings with very imposing exteriors and delicate, elegant interiors. Architects selected high quality materials from sources in Europe and took inspiration from the Chinese imperial gardens. Traditional large Chinese roofs are combined with low-pitched rooflines typically utilized by Mr. Frank Lloyd Wright, providing the Imperial Summer Palace with a high degree of pride and dignity.

**Traditional roof newly interpreted.** The roof of an ancient Chinese building is sloped, which plays an important role in chromatic townscape. In earlier time, the roofs' colour was slate. With the development of techniques in tile making, tile colours became wider. However, the colour usage in ancient architecture is regulated by hierarchy and the theory of five colours and five essences. New techniques for the production of roof tiles made an expansion of the colour range possible. Taking into account engobed tiles that feature in ancient Chinese palaces, they selected Koramic clay roof tiles. The use of three different clay roof tiles in blue braised and natural red reminds of an ancient imperial palace.

**Wisdom and detail.** The project follows the basic pattern of siheyuan, which is a historical type of residence that was commonly found throughout China, exhibiting traditional Chinese morality and further stratified Confucian order. The planning of the project involved meticulous attention to detail, so that every building is precisely planned with up to 20,000 architectural blueprints.



<b>Project</b>	Villenpark Imperial Summer Palace, China
<b>Client</b>	Longfor Properties Co. Ltd.
<b>Architect</b>	Mr. Feng Wenfei, WFA Design Inc.
<b>Developer</b>	China State Construction Engineering Corporation
<b>Roofer</b>	Beijing Claymedia Trading Co. Ltd.
<b>Clay roof tile</b>	OVH blue braised and natural red





*Traditional Chinese architecture combined with modern western Simplicity sets the 91 imperial houses of the Imperial Summer Palace near Peking apart.*







*The selection of materials and colours harmoniously combines old and new at NRW.BANK in Münster.*

*Strong shading, noble colours and details all in ceramic: Monk and Nun style roof without mortar.*





# Expert roof renovation

## New installation and renovation at NRW.BANK in Munster

**The new silhouette of the development bank for North-Rhine Westphalia, NRW.BANK Munster, is characterised by a detailed interplay between the colours of bright sandstone and dark building elements, elegant shapes and a precisely planned roof. The meticulous, all-ceramic details make the black and brown engobed Monk and Nun tile roof particularly attractive.**

The building, part of which is classified as a historical monument, was removed from a section of post-war row housing, renovated as an individual, representative structure, and contrasted with a modern, new building as a historical reference. The ensemble, created with high-quality materials, adds a new and eye-catching element to the city landscape. The roof, roofing work and the additions under the roof were

awarded first prize in the renovation competition held in 2010 by the German trade journal, Dachdecker-Handwerk (DDH).

**Inspired by the building's history.** Historical photographs from 1909 show a Monk and Nun tile roof on the old regional bank. Even though the roof was not protected as an item of historic interest, the architects decided to retain the historical look of the Monk and Nun tiles. However, they chose a version of the roof tiles that could be laid without mortar. This eliminates the related maintenance and gives the roof a particularly clean and elegant appearance. Architect Ulrich Engel of Eisfeld Engel Architects in Hamburg designed the historic roof with a remarkable degree of care and attention. Nothing was left to chance.



**Project** New construction and renovation at NRW.BANK, Münster

**Developer** NRW.BANK, Düsseldorf  
**Architect** Eisfeld Engel Architects, Hamburg

**Roofer** Ulland Dachtechnik GmbH  
**Clay roof tile** Monk and nun tiles, engobed black-brown (special colour)



## Interview with the architect Ulrich Engel of Eisfeld Engel Architects

### Why did you choose to use the historical Spanish-style roof?

We found the strong interplay of shade attractive. In addition, the high profile of the Spanish-style tiles gave the roof a distinctly noble accent.

### What role did the roofing materials play?

The general impression that the roof and the building make is generated by the carefully coordinated interplay between the colours of bright sandstone and dark elements such as roof tiles and window frames. The engobed black-brown roof tiles were based on the samples. The details of the colour were achieved by all-ceramic roof tiles with ready-fit tiles, eaves tiles, ridges, starting tiles and verge tiles.



### Particular attention was given to the dormers. What was the guiding design idea?

On the one hand, the dormers were a good match with the façade windows underneath, and they also precisely fit the layout of the Spanish style roof. In order to give the dormers a sculptured effect, we designed them with flat surfaces and straight lines. In addition, they were just the right height and width so that we did not need to cut the roof tiles next to them. This gives the dormers sharp, clean lines and provides the roof with a touch of perfection.













# A multistage project while school is in session

**New eco-friendly building while school is on**

**The new building at the Collège Henry Wallon in St. Martin d'Hères was erected on the grounds of the old school complex as part of a city-wide construction project. The building was given soft lines to visually underscore the connection between nature and the surrounding architecture. The project had to accommodate ongoing classes while the building was being constructed, and environmentally-friendly renewable materials were used.**

The H-shaped school complex consists of three joined buildings: one hall with straight lines, one with curved lines and one with a rounded form that serves as a connection and pivot, joining and continuing the lines of the two building sections. This arrangement gives the building complex both an urban and educational character. The outer façades facing the street and highway are provided with shading made of glass and clay roof tiles, whereas the inward-facing façades are covered with local wood and glass. This dualism between the different materials underscores the building's incorporation in an urban context on the one hand, by using clay products to give it a sense of warmth and texture. On the other hand, the wood used for the inner façades provides the sense of calm and balance needed for the acquisition of knowledge.

**An ensemble rich in curves.** The layout of the buildings is characterised by an interaction of curves and counter-curves that enclose a schoolyard at the front of the complex. "The form and texture of the Actua clay roof tile make it the perfect building element for echoing the curved lines, and its natural colour blends into the urban surroundings," notes Jean-Paul Roda, architect at r2k architecture.

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*Nature and architecture in harmony: The soft curves of the building underscore the visual connection between nature and the surrounding architecture. A goal of the project was to use environmentally friendly, renewable materials.*





**In the spirit of sustainability.** The major changes involved in the renovation satisfy the requirements of the French environmental standard RT 2005: Protecting the schoolyard from cold wind, avoiding over-insulation, eliminating thermal bridges by installing light façades on the school itself, the dormitory, the sports hall and residences, and draining the rainwater across a roof covered with foliage. The large glass windows make full use of daylight, and all rooms are equipped with energy-saving, individually controlled lighting.

**A logistical masterpiece.** This building project was performed in individual stages while school was in session and completed in September 2010. During the first building phase in 2008, four residences were

constructed, and the old residences were torn down. The building with straight and curved lines as well as the connecting hall were built in the second phase, followed by the construction of the cafeteria and sports hall in the third phase. After the school transferred to the new facilities, the old school building was torn down in the fourth and final phase. By using regional and recyclable materials, this unique building project skillfully combined environmentally-friendly construction with creativity on the part of the architects and city planners.







**Project** Henry Wallon school, St. Martin d'Hères  
**Client** Conseil général de l'Isère  
**Architect** Jean-Paul Roda, r2k architecture  
**Clay roof tile** Actua natural red

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*The façades facing the street and highway are provided with shading consisting of glass and clay roof tiles, whereas the façades facing the schoolyard consist of local wood and glass. The wood façades provide the necessary calm and balance for learning.*



# Modern rural in ceramic

## Traditional gable roof in unusual attire

**Gooiland lies between Amsterdam, Amersfoort and Utrecht. The area is marked by heaths, forests, fields and small lakes. The residents are proud of their region and the traditional image of their local sites. Architect Koen van Velsen from Hilversum was awarded the demanding job of creating a modern, new office building.**

At the beginning of the planning stage, Koen van Velsen was confronted with the demands of the building authorities and organised residents. He studied the specifications provided by the building authorities and the wishes expressed by the residents. He then drafted a building with a gable roof and ceramic façades as desired. But the architect went one step further. His draft included a nod to the agricultural building tradition in Gooiland, and he created a type of “farm building” with dimensions and a geometry that corresponded to the design of agricultural architecture. Even the layout of the property was conceived as a modern interpretation of a farmyard with its pathways and pond. To retain the consistently natural feel, the parking area for employee vehicles was moved to the basement.

**Modern tradition.** In order to comply with the design specifications while creating a distinctly modern building, van Velsen decided to use ArGeTon façade panels. Traditionally made of rough clay ware, i.e. fired from the same material as roof tiles, these panels can be comfortably used with modern building materials such as glass and steel since they come in standard dimensions and are diamond-cut to the closest millimetre. The architect selected two types of Terzo panels with two and three false joints. The panel with three false joints looks like flat façade bricks,

and the panel with two false joints makes the brick surfaces appear larger. Installed in a random pattern, the panels hint at a geometric structure. This design was supported by choosing a lively structure, with a sand-coloured, changing engobe surface.

**No two panels are the same.** The building, headquarters to an asset management company, houses reception areas, conference rooms and office rooms. The harmony in the colours of the building shell, described by the architect as a “perforated envelope”, is mirrored by similarly-coloured high-quality materials in the interior of the building. The transparency between the rooms and the open views provided by the large exterior windows generate an open work atmosphere.

**Project** Office building, Gooiland  
**Architect** Koen van Velsen  
**Façade and roof** ArGeTon façade panels, Terzo sand hues







*In order to comply with the strict instructions provided by the building authorities and the client, architect Koen van Velsen decided to use ArGeTon façade panels.*









# True to tradition

The harmony linking the local peculiarities and modern technology

**The construction of a dwelling house has incorporated utilisation of modern technologies and materials, realising all the customer's requests and creating a comfortable environment, which highlights the region specific architectural features ingrained over the centuries.**

Although Lithuania is a small country, in every city some typical architectural singularities can be found. The coastal region and Klaipėda demonstrate particular difference in the overall context of Lithuania. This resulted from a number of factors: the harsher climate, the less generous nature, the life of the port, the traditions of the German regions, etc.

Over time Klaipėda developed an austere, robust and stable architecture. It is dominated by masonry tiles covering buildings of a clear volume. Tudorbethan elements can be found in the City Centre and the Old Town. The area where the house has been built does not belong to the City Centre. Although the lot is a part of a private residential neighbourhood, it is not densely populated and built-up. In the close vicinity there is a recreational park of general use, the Danė riverside and artificial ponds. The lot is large enough, with an area of more than 2,500 m<sup>2</sup> to accommodate the entire programme presented by the customers.

## Coming together through architecture.

Rendering of the local pulse and peculiarities, as well as the feeling were of great importance. In order not to discord with the surrounding small-scale residential buildings and maintain the environmental scale,

the main volume of the building was divided into two parts with different finishes. The outhouse is the third part of the same volumes, completing and closing the entire composition. This third building integrates the both finishing materials used in the main volume.

**External effects included.** The facades of the external volumes are finished with black Datura clay tiles, which provides a feeling of strength and security within the yard space. Moreover the tile texture, a change of light and shadows, makes those facades friendly to the people around. Between the two dark tiled volumes is a bright white volume with natural grey-painted wood details inserted, which is finished with facade panels.

Both volumes, regardless of the different finishing materials, used the same construction's principle as the one used for the external walls, i.e. the ventilated facade construction. In case of constant windy and rainy weather this is one of the most rational ways to ensure maximum moisture protection of interior spaces.



*To fit better into the local architectural style, the main volume of the building was split into two parts, each with a different finish.*

**Project** Single family house,  
Klaipėda city

**Client** Grigorij Sabatin and  
Larisa Golodenko

**Architect** Gintaras Priokockis, Asta  
Priokockienė, Justas Priokockis  
UAB "Kelmeda",  
UAB "R2K grupė"

**Construction Company** UAB "Kelmeda",  
UAB "R2K grupė"

**Clay roof tile** Datura slate engobe



# The business world intersects with nature

An office complex in harmony with the natural surroundings of a historical landscape park

**Embedded in the well-maintained park landscape of an old middle-class quarter yet located in the middle of the financial centre of the Lyon West region, Celtic Park is the first office complex to receive the French environmental certificate HQE (Haute Qualité Environnementale).**

In addition to high energy efficiency, this real estate development project for offices and commercial buildings successfully blends with the natural environment. The developer, the DCB International Group, was careful to retain the existing cedars, larch trees, maples and lime trees of this centuries-old landscape park in Limonest comprising approximately 15,000 m<sup>2</sup>. The L-shaped building encompasses this tree-filled landscape.

**A suit of clay.** Since the architecture was uncomplicated and functional, special attention was given to the façade. Prefabricated wood panels with an integrated, 15cm-thick insulation layer were affixed to the concrete walls by means of metal framing. Slate grey Actua clay roof tiles cover the underlying body on three sides. The insulation that this provides is noteworthy: the outer shell has no thermal bridges. Why did the architects choose Actua roofing tiles? "The material is long-lasting, more economical than a standard façade, and can be easily installed by any roofer. In addition, the shape, size and colour of the Actua roof tile underscores the modern character of the building. The deciding point was the insulation that it provides in relation to the entire project," explains Damien Poyet of the AFAA architectural office.

**A nod to nature.** With energy costs of five to six euros per square meter per year, these three office buildings offer savings in more than just energy. The renewability of the resources used was also taken into consideration: The double-shell panels made of

local wood (Scots pine) and the clay roof tiles of the façades are completely recyclable. The view of the exterior through low-emission, large glass windows gives the staff unrestricted visual access to nature. The low building height and the reflections in the glazed façades emphasise the incorporation of the landscape and gives one the impression of immersion in nature.

The two buildings, Connemara and Brocéliande, are a precursor of the third building, Avalon. This represents the last leg of the project which will encompass 6,500 m<sup>2</sup>.

**Project** Office complex in Celtic Park, Lyon

**Architect** Audart et Favaro Architecture (AFAA)

**Client** DCB International

**Clay roof tile** Actua slate grey

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*Slate grey Actua clay roof tiles give the set of buildings their characteristic appearance.*















# Imaginative and multifaceted

Through a gentle play of colours a ceramic roof becomes part of the greenery

The contrast between the sky's colour over the neighbourhood Oosseld and the colour of the new multifunctional accommodation (MFA), Zonneboom, creates a fascinating spectacle. The facilities in the area of Doetinchem have been completely renovated with special consideration to the MFA. This building is a very spectacular one thanks to the thousands of ceramic roof tiles.





The Zonneboom, which refers to a bright tree, is a multifunctional building that includes two primary schools, sports facilities, a nursery, an after school service and separate reception rooms to rent out. Drost + van Veen architecten were in charge of the project and had to respect not only the rectangular plot but also the wish list of the municipality.

**Traditional roof shape.** Simone Drost remembers the challenges of the project: “The quarter was divided into two parts, and we wanted the new facilities to be more integrated. The building is located in a green area that was built in the last century. The typical sharp shape of the roof in the area of Oosseldse constitutes an interesting architectural feature, which is why we wanted Zonneboom to be built in that way”. This desire was difficult to combine with the program as the architect explains: “That type of sharp high roof requires a lot of square meters, which is

expensive to cover. We still wanted to do something with the shape but to build a flat one. Of course we paid attention to the material: Ceramic.”

**Soft skin.** The form of the building is complex and the use of a different material on one of the façades was difficult to set up. In the centre of the building, a brightly coloured staircase leads to the different floors. The hall is lower than the others levels. Simone Drost says: “We chose a monolithic building, which really stands for the district’s centre. For the façade we wanted a tactile and durable material that would perfectly fit the building”.

Given the reference to the Oosseldse types, the combination of brickwork and tile seemed obvious but the architects were concerned that the building would not contrast enough with the already existing buildings and pavements that are made out of bricks and pavers. So they took a different direction and came out





with ceramic roof tiles, which matches the colours of the green areas. The choice of colour and pattern was a complicated process itself as five colours and three transparent structures have been distilled, resulting in a palette of greens, greys and white. The effect is quite beautiful; especially thanks to the shadows of the Biber tiles that provides the building with relief. "The colour of the facade varies according to the weather. It also tends to colour the windows", says Drost. The entrances, the windows and the building's corners are highlighted by a white frame and the use of a different roof tiles' pattern. A leaf motif was chosen as a decorative element. "The leaf is a direct reference to the green area", says the architect van Veen. From a distance, the leaf motif becomes clearer, while the tile's shape fades away. "It's a very tactile building. From a distance it looks very different. The façade gets a third dimension thanks to the gradual build-up" (one part of the tile is under the other tile).

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*The Eijzenberg Biber clay roof tiles in five different colours create a living facade, does justice to the character of the representative character city centre.*

**Project** Multifunctional Accommodation  
Zonneboom, Doetinchem  
**Architect** Drost & van Veen architecten  
**Client** Sté Woondiensten  
**Clay roof tile** Eijzenberg Biber Dachziegel in five, specially produced colours



# A living body expression

Escape the straight lines without disrupting the harmony

**The reconstruction of the building for the Veterinary Academy of Lithuanian Health Sciences University represented a challenge. Not only is the whole faculty area a state-protected cultural monument and had to be adapted according to modern and scientific standards. The challenge was also in creating a connection to the fauna and thereby preserving the harmony of the building ensemble.**

The complex of buildings of the Veterinary Academy was built between 1930-1938. It includes the central palace, the educational divisions and other structures covering the area of almost 5 hectares. The ensemble of the Academy buildings is a state-protected cultural monument. In 2007, the reconstruction of several buildings was planned. During the conversion of one of the blocks and its adaptation for scientific and research activities of the Veterinary Institute, its interior was redesigned, and new, modern laboratories of several types were equipped. However, not all facilities could be accommodated in the main, state-protected building; therefore we had to build an extension for staircase, elevator, technical rooms and several additional offices.

## Finding the harmony within the animal.

On one hand, the integral nature of the state-protected building of the Academy and its moderate and reserved style, volumetric harmony and moderate colours that have been popular in the 1930's, required the project's architects to create a structure not disrupting the harmony of the ensemble. On the other hand, the specific purpose of the complex invoked was to look for visual interfaces to the animal world, to escape from straight lines and rectangular forms, and to look for expression close to a living body of a creature.

**Opposites attract.** This in particular induced the choice of clay roof tiles Pottelberg 301 with different colours and gloss. They ideally suited for the objective of making a living scaly body. The contrast principle has justified the expectations, and the new wing did not significantly disrupt the principles of composition of the ensemble and did not clear away the identification criteria of a historical period, but clearly showed

us who, when and by what means and materials the ensemble has been built. The Veterinary complex is dominated with park style lighting, and only some of the buildings have sparing illumination at the entrance to the buildings. Following the same principle of contrast, the illumination solution was completely different this time – special ventilation ceramic tiles with integrated LEDs. This type of illumination provides particular shine at night, and imparts even more features of a living and moving body to the building.

<b>Project</b>	Lithuanian Veterinary Academy, Baisogala
<b>Architect</b>	Violeta Beigienė und Vydė Vaičenonytė, UAB "CEDRA"
<b>Developer</b>	UAB "Pireka"
<b>Client</b>	Lithuanian Veterinary Academy, Lithuania
<b>Clay roof Tile</b>	Clay Roof Tiles Pottelberg 301 in six different colours (anthracite, slate matt glazed, wine red glazed, black glazed, rustic, blue braised); outbuilding: Marsylka natural red

*Clay Roof Tiles with integrated LEDs create a very special illumination during the evening and night.*















# A private dream house

## Letter from a thrilled home owner

**How the British builder H. Darley, currently living in California, got his original British Tudor style house.**

Dear Stuart,

I would like to share with you a little history about my new home. In 2005 I decided that it was time to design and build my dream home which I had thought about doing for the last 25 years.

Living in a beautiful place like Carmel California with all of its different types of homes was quite exciting. What finally brought me to start was my annoyance at what homeowners, realtors, designers, contractors were calling "European or English Tudor", an artistic misinterpretation, and it drove me crazy!

I was determined to build a true English style home from the ground up. I started scouring the internet for products; I went to England – my homeland – and visited salvage yards, brick foundries, roofing suppliers, etc.

It was crazy to ship 15,000 bricks, so I brought back the 3 that I wanted to blend and found US foundries to make them. I had my custom made cast iron gutters and downspouts made in Newcastle UK and shipped over, I found 10 matching 110 year old 6 panel English oak doors in the UK and shipped them over as well.

When it came to the roof I knew I wanted a traditional English/French red clay 6 ½ by 10 ½ clay plain tile. The problem was I could not find it in the US. I ended up talking to a UK manufacturer who recommended "Northern Roof Tiles" in Canada, who did cover North America.

Stuart and his team were amazing, they found exactly the look and blend that I wanted. We ended up using a blend of "French Patrimony", which looks fantastic.

After my home was finished I heard a rumour that the City of Carmel Historical department was trying to work out how to protect my brand new home from ever being changed, as it is so perfect for Carmel.

Most of the constant praises I get for my home are about the Roof, Brick, or windows. I am looking forward to building a "French" style home on my lot next door and working again with Northern Roof Tiles.

For more pictures of my home please feel free to visit my website  
[www.acrossthepondconstruction.com](http://www.acrossthepondconstruction.com)

Yours Sincerely,  
Robert H Darley



<b>Project</b>	Single family house, Carmel
<b>Client/Planner</b>	Robert H. Darley
<b>Koramic partner</b>	Northern Roof Tiles/Stuart Matthews, Ontario, Canada
<b>Clay roof tile</b>	Aléonard Patrimony, 75% Ocré Lichen, 25% Vert de Lichen



# Like a ship in the forest

Single-family house with a round roof in Nordheide near Hamburg

**Roofs are sometimes called the crowns of houses. Like the unconventional roof of a single family dwelling in Nordheide south of Hamburg, they also tell an interesting tale about the developer, the architect and building techniques. The round roof with a ridge is a variation of a barrel roof and is sometimes called a zeppelin roof.**

The developers, a couple with careers in the media, were not satisfied with the double-pitched roof originally specified by the building authorities, and so they looked for a more interesting alternative. In trips abroad, the couple was particularly impressed by large barns in Ohio with their highly rounded roofs. In Scandinavia, they were struck by the contrast between the dark roofs and light wooden façades. These two impressions gradually gave birth to an idea of a house with a large, convex tiled roof. The house needed to consist of natural materials and be a safe refuge for the young family far away from the hectic day-to-day world of the media.

**Modern roof interpretation.** The architect, Nils von Minckwitz from Berlin, justly compares this roof design with “a ship’s hull in a sea of pines” since the zeppelin roof is also termed a “hull roof”. The flat, true graphite Koramic Actua 10 roof tiles represent the dark hull of ship. In addition, notes Minckwitz, “roof tiles are a modern phenomenon and hence give the traditional roof shape which initially arose in the 1920s a new, modern twist.”

The roof is covered with tiles from stem to stern and takes up approximately one-third of the height of the building. Starting at eaves which are vertical like a façade, the roof curves protectively over the top floor and then runs at an approximately 30 degree angle to the ridge. The half-offset roof tiles emphasise the horizontal lines. Even though the roof is covered with flat roof tiles, the curve seems natural. The special, straight Actua ridge is an appropriate choice for the design.

**Home sweet home in nature.** In addition, the “family ship” in Nordheide is a thoroughly modern structure. With at least 16 cm of insulation in the walls, 24 cm in the roof, triple glazing, solar and wood

heating, the single-family house made of natural materials is largely energy self-sufficient. There are no real heating costs to speak of. After all, the house is in the middle of a forest.

**Unique roof design.** The zeppelin roof is a rare roof design related to the barrel roof, and is generally not found in most reference works for roofers and carpenters. However, the designation “zeppelin roof” is used by educators in the roofer’s school in Lehesten, Thuringia. In contrast to a genuine barrel roof that does not have a slope or a ridge at the highest point of the roof, the zeppelin roof has a slope and a ridge at the top which allows it to be completely covered with roof tiles.

This particular round roof design first came into being around 1920 and is characterised by the so-called Zollinger style. Architect Fritz Zollinger, formerly head of the building department in Merseburg near Halle, patented the wood-saving Zollinger slatted roof. His economical design offered large, support-free attic space and, as a side-effect, created a new roof shape. The technique was used until approximately 1940 for businesses and residences in Germany, Europe and the USA. The roof of the single-family house in Nordheide has nothing but its shape in common with the Zollinger design.

<b>Project</b>	Single-family dwelling in Nordheide, near Hamburg
<b>Architect</b>	Nils von Minckwitz, Berlin
<b>Roofers/carpenters</b>	Holzvolk, Waddeweitz
<b>Roofing system</b>	Actua 10, true graphite

*Eye-catching roof design: Koramic design tile, the Actua 10, for a unique house in the forest.*















# An interplay of art and craftsmanship

## Masterful roof renovation in the spirit of the Arts and Craft movement

**The historic roof of the landmarked British country house “Swiss Cottage” posed special artistic and technical challenges. The strongly weathered roof with its distinctive geometric pattern had to be completely restored. Through a perfect synergy of technical know-how and craftsmanship the challenge was more than met.**

Located in a conservation area, “Swiss Cottage” is one of over 200 properties on the Estate, which is situated within the Howardian Hills, an Area of Outstanding Natural Beauty (AONB), just 15 miles north east of York. The design of the house was inspired by the Arts and Craft movement, which was developed in England during the second half of the 19th century. The steep-pitched roof features a distinctive geometric pattern and had to be entirely replaced as the tiles were severely weathered.

**Laying a roof by hand.** Sandtoft’s Humber clay plain tiles in Natural Red and Antique Slate have been used on the main roof, plus an extensive number of arrow head feature tiles, also in Antique Slate. To meet the requirements of the local planning authority, the pattern had to be replicated using handmade tiles and 90° Slotted ridge tiles with Fleur-De-Lys and Ball inserts.

Graham Dodds from Dodds Roofing Services, who was responsible for the re-roofing, said: “We partnered with Sandtoft as it has extensive experience of working in conservation and restoration projects. The team advised us on the most appropriate products as well as the fixing specification.” The decorative ridges and diamond shaped tiles were all handmade by Sandtoft’s skilled craftsmen.

“Recreating a geometric pattern is no easy task, but with the support of Sandtoft and its heritage service, we have succeeded in replicating the original design and restoring this character cottage back to its former glory.”

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*By hand: To meet the requirements of the local planning authority, the pattern had to be replicated using handmade clay roof tiles and 90° Slotted ridge tiles with Fleur-De-Lys and Ball inserts.*

Nigel Dyer, Sandtoft’s heritage service manager, added: “The roofers had to carefully draw the pattern onto a grid to enable our craftsmen to match the original tiles and fittings. Using our technical knowledge and specialist methods, we have produced authentic finished products which meet both the requirements of the local planners and the Castle Howard Estate.”

**Preservation as top priority.** Over the last five decades Castle Howard has committed millions of pounds to conservation and essential repairs, in addition to regular spending on maintenance and management, as part of the estates ongoing restoration and conservation programme.

In December 2007, Castle Howard partnered with English Heritage and Ryedale District Council to draw up a management plan to ensure a sustainable future for the Castle Howard Estate. This plan won the Heritage category at the national planning awards hosted by the Royal Town Planning Institute (RTPI) in February 2010.

<b>Project</b>	Swiss Cottage, North Yorkshire
<b>Client</b>	Castle Howard Estate
<b>Roofer</b>	Dodds Roofing Services Ltd,
<b>Clay roof tile</b>	Humber Clay Plain Tile in natural red and antique slate, handmade arrow head feature tiles in antique slate, handmade 90° slotted ridge tiles with Fleur-De-Lys and ball inserts in antique slate.





# The beauty of clay roofs

## Leisure resort on the fringe of the Bay of Bengal

**Spread over 23 acres, Ocean Spray is a resort that offers unadulterated leisure and a chance to explore Pondicherry's quaint and rich culture. Situated on the east coast of India, Pondicherry retains strong cultural influences from its past as a French colony. It is just 144 kilometres from Chennai, a major metro, and Auroville, the international township dedicated to human unity.**

Ocean Spray is a recent addition to the cluster of leisure properties that dot the coast. Its elevation and grand entrance draws one's attention as you drive down the highway. Designed by well-known, Bangalore-based architects Siraj and Renu, the design imperative was the creation of an iconic resort with elegant landscaping that could be counted among the finer properties in its category.

### Resisting the forces of nature in style.

Ocean Spray's location by the Bay of Bengal necessitated careful consideration to design, construction and the optimal selection of material. High humidity, heavy rainfall, salt content in moisture and the area's proclivity for cyclones influenced the design and structural elevation.

Koramic tiles were chosen for their weather resistance and anti-reflective nature. These clay tiles also have

qualities like dimensional stability, heat resistance, durability and maintenance friendliness – all highly desirable qualities given the fury of the elements during the annual cyclone season.

<b>Project</b>	Ocean Spray Resort, Bay of Bengal
<b>Client</b>	Bonjour Bonheur Ocean Spray
<b>Architect</b>	Siraj & Renu, Bangalore
<b>Main contractor</b>	Mertho Constructions
<b>Clay roof tile</b>	Romane natural red, nuanced & straw-coloured

*For the roof, Koramic tiles were chosen. The high weather resistance, dimensional stability, heat resistance as well as the durability made the difference.*









