



architectum

#13

International Magazine
for Roof and Façade Architecture
2013 | www.architectum.com



PHOTO: CHRISTIAN DUSEK

FRANZ KOLNERBERGER
HEAD
PRODUCT MANAGEMENT
ROOF SOLUTIONS

EDITORIAL

Dear Reader,

Can you imagine clay roof tiles exceeding their limits? The 13th issue of Architectum illustrates how clay roof tiles can still go beyond all expectations. Which is why we have extended the subtitle to: International Magazine for Roof and Façade Architecture. Before I introduce this latest edition, let us take a look back to the photograph of the animated façade on the cover of our previous issue. This stunning façade of the Dutch multifunctional building “Zonneboom” designed with tailor-made Koramic roof tiles won the latest IFD (International Federation of the Roofing Trade) award. Congratulations Drost & Van Veen Architects!

I would now like to invite you on a journey across Europe and as far as Asia where different projects illustrate that clay roof tiles offer more than just protection. Pritzker Prize winner Wang Shu even uses reclaimed tiles to create new worlds. Come and discover urban planning and architectural qualities on roofs and façades. When roof and façade merge the tile becomes a dominant factor in appearance and colouring. Traditional solutions stand next to ambitious concepts, which amaze us with their aesthetic appeal and material quality. An unexpected interpretation of the built environment awaits you in both refurbishment projects and new buildings. And in all cases the clay roof tile displays all its qualities with ease, in terms of formats, colours, functions, and durability.

Let yourself be surprised!

IMPRINT

EDITOR Wienerberger AG, 1100 Wien **PUBLISHER** Österreichischer Wirtschaftsverlag GmbH, 1050 Wien **CHIEF EDITORSHIP** Christine Müller (Österreichischer Wirtschaftsverlag), Marion Göth (Wienerberger AG) **COLLABORATION** Rūta Leitanaitė (LIT), Marion Kuzmany (AT), Christian Kriemelmeyer (DE), Gerhard Halama (DE), Sabine Merlevede (BE), Arnaud Mounier-Duchamp (FR), Michelle Richards (UK), Elaine Liversidge (UK), Balciunas Dainius (LIT), Sabaitis Tomas (LIT), Monika Sikorska (PL), Alexa Uplegger (DE) **PHOTOGRAPHS** Marc Sourbron (6–7, 28–29), Ruud Peijnenburg (10–11, 22–25), Verplancke (12–13), Algimantas Kančas/Gustė Kančaitė (16–19), Stéphane Chalmeau (20–21), Andrew Smith SG Photography Ltd (26–27), Piotr Deszkiewicz/Hotel Krasicki (30–31), Polish Roofers Association (PSD) (34–35) **GRAPHICS AND DESIGN** Simon Jappel (Österreichischer Wirtschaftsverlag) **PRINTING** Stiepan & Partner Druck GmbH, Hirtenbergerstraße 31, 2544 Leobersdorf, **PRODUCTION** Ueberreuter Druckzentrum GmbH

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Ningbo Historic Museum,
2003–2008, Ningbo, China
Photograph: Lv Hengzhong

MASTER OF RECYCLING

THIS YEAR, THE WORLD'S MOST RENOWNED ARCHITECTURE AWARD WAS CONFERRED TO A CHINESE ARCHITECT FOR THE VERY FIRST TIME: WANG SHU WHO STANDS OUT NOT LEAST DUE TO HIS SOPHISTICATED RE-USE OF DEMOLITION BRICKS AND TILES: "THERE HAS ALWAYS BEEN A RECYCLING TRADITION IN CHINA. I CALL IT RECYCLED CONSTRUCTION."

"Old bricks and tiles convey a sense of time and the message of natural substances which are able to breathe. We are constantly confronted with carelessly discarded demolition materials. I want to respond to this situation with my design" Wang Shu explains the use of old bricks for his buildings. The concept of recycling bricks and tiles from demolished traditional houses has evolved into a speciality of Hangzhou-based "Amateur Architecture Studio", which was established by Wang Shu and his wife Lu Wenyu. "Amateur" stands for the spontaneous and experimental aspects of their work – contrary to, for example, "authoritative" or "monumental". The combination of a local understanding of culture and traditional craft methods with experimental designs and ecological future-oriented construction make "Amateur Architecture Studio" unique.

Wang Shu characterises his access to the Chinese architectural tradition as an important component of his concepts: "Traditional architecture in China is based on local origins, on material orientation, the climate and a lifestyle, in which people maintain a close relationship with nature. It is not about a forever unchanging life, but about the ability to accept changes in nature and respond to them; this also speaks for sustainable, environmentally compatible building, which I want to express in my design. For me 'banal retro looks' and discussions about 'style' and 'symbolism' are meaningless."

ENVIRONMENTALLY COMPATIBLE CONSTRUCTION In 2007, the Xiangshan Campus of the China Academy of Art in Hangzhou was completed, where more than 2 million tiles from demolished build-



Tiled Garden, 2010, 10th Architecture Biennale, Venice, Italy
Photograph: Lu Wenyu



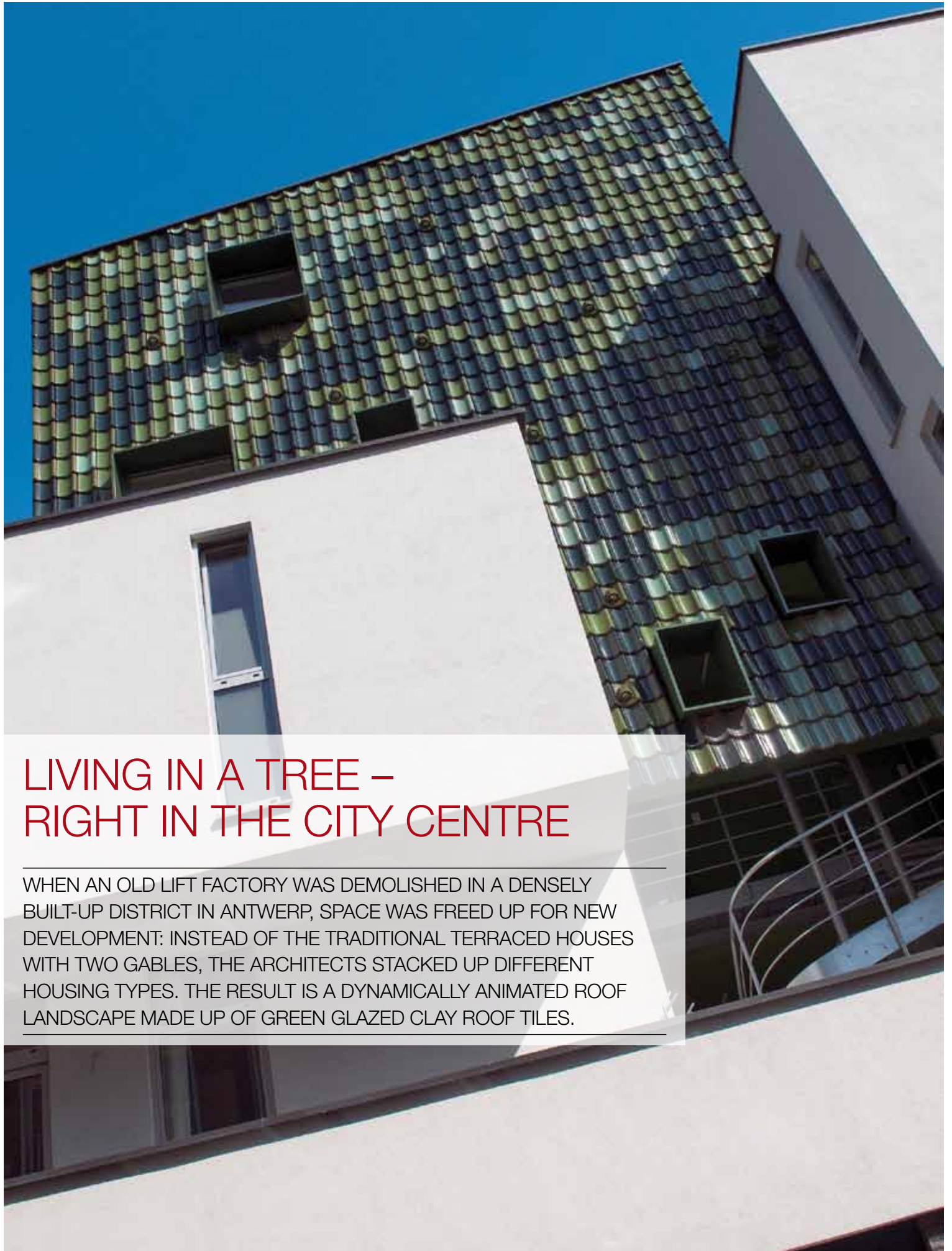
Xiangshan Campus, China Academy of Art, phase II, 2004-2007, Hangzhou, China
Photograph: Lv Hengzhong

dings were used for the roof. In the same year, the architects received the “Global Award for Sustainable Architecture”. One of their most significant projects is the Ningbo Historic Museum completed in 2008. The solid building that looks like a fortress is distinctive due to the massive volumes cantilevering outward towards the top, and which are traversed by courtyards, alley-like recesses and stairs. The most striking component, however, are the facades for which tiles obtained from demolished traditional houses in the surrounding province were re-used as a facing layer. Old, partly broken and new materials combine to form an impressive collage of about 20 different types of grey and red natural stones, tiles and bricks.

In 2010, the architects designed the Chinese Pavilion at the 10th Architecture Biennale in Venice

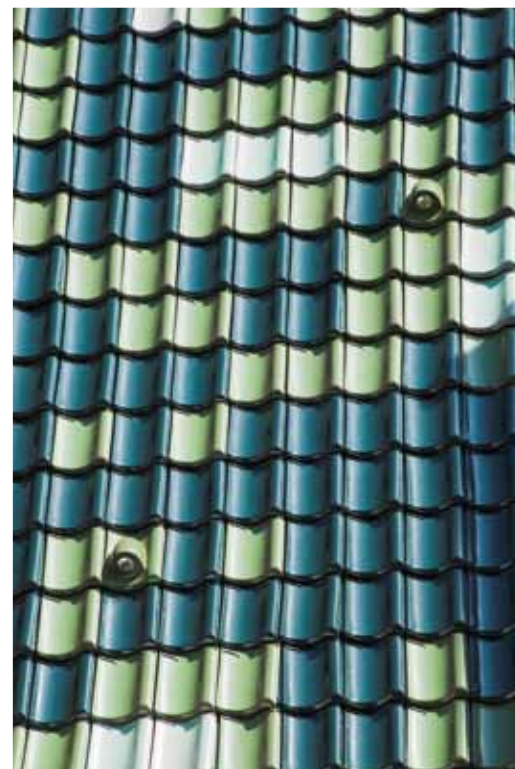
featuring the impressive “Tiled Garden” installation, which stretched across the pavilion’s forecourt as a large accessible clay tile roof.

In May 2012, Wang Shu was awarded the Pritzker Prize, the highest accolade for architects. By nominating Wang Shu the jury sent an important signal, and one which represents an alternative to China’s current development that is mainly characterised by investment projects and a lack of building culture.



LIVING IN A TREE – RIGHT IN THE CITY CENTRE

WHEN AN OLD LIFT FACTORY WAS DEMOLISHED IN A DENSELY BUILT-UP DISTRICT IN ANTWERP, SPACE WAS FREED UP FOR NEW DEVELOPMENT: INSTEAD OF THE TRADITIONAL TERRACED HOUSES WITH TWO GABLES, THE ARCHITECTS STACKED UP DIFFERENT HOUSING TYPES. THE RESULT IS A DYNAMICALLY ANIMATED ROOF LANDSCAPE MADE UP OF GREEN GLAZED CLAY ROOF TILES.



In this green tower consisting of six residential units arranged around a large green courtyard one almost feels like being in the crown of a tree. The design of the individual floor plans is equally original, because the architects from Import Export Architecture formally based their designs on the cross-sections of different fruits.

The architects have conceived a tree-like residential tower consisting of six units arranged around a green inner courtyard. Import Export Architecture answered the question of how you can prune away parts of a densely built-up inner city area with solutions inspired by the cross-sections of various fruits: an avocado, an apple, a tomato or a kiwi. The possibilities were obvious, with the extremes ranging from the removal of a large, central kernel (as in the avocado) around which buildings can be constructed, to thinning out the built-up area by picking out discrete small seeds (the kiwi) with equally dispersed structural developments.

STACKED UP LIVING Instead of constructing a traditional terraced house, the architects stacked six different typological layouts in a block adjacent to the street. The volumes are displaced horizontally with respect to one another and are crowned with a roof terrace. The result is a dynamic façade made up of interlocking volumes that the mind cannot absorb in just

a single glance. The original idea of creating a vertical façade of greenery was quickly abandoned. Instead, the architects took photographs of the crown of a tree, which they then translated into suitable materials. The photo was blown up until the individual pixels could be seen. Exactly the same arrangement of pixels was then turned into a wall cladding by applying the pattern in three shades of green to glazed clay roof tiles. The architects' preference was for clay tiles because they wanted to use a material as a way of introducing a suburban element into the dense city-centre context. The bark-like structure of the ground-floor plinth, which is finished with brown facing bricks, extends the tree metaphor.

The view of the city is provided by square window openings framed with coated aluminium, with the actual window being recessed. The positioning of each of these openings has been carefully considered, so that they act as frames for particular elements of the cityscape: a church tower perhaps, or an architecturally especially attractive building.

INFO

PROJECT

Construction of an apartment building with six residential units for the inner-city area

CLIENT

AG Vespa – autonomous municipal company for real estate and urban projects in the city of Antwerp

ARCHITECT

IEA Import Export Architecture, Antwerp

CONTRACTOR

D'Huylst Van Rymentant, Lier

ROOFER

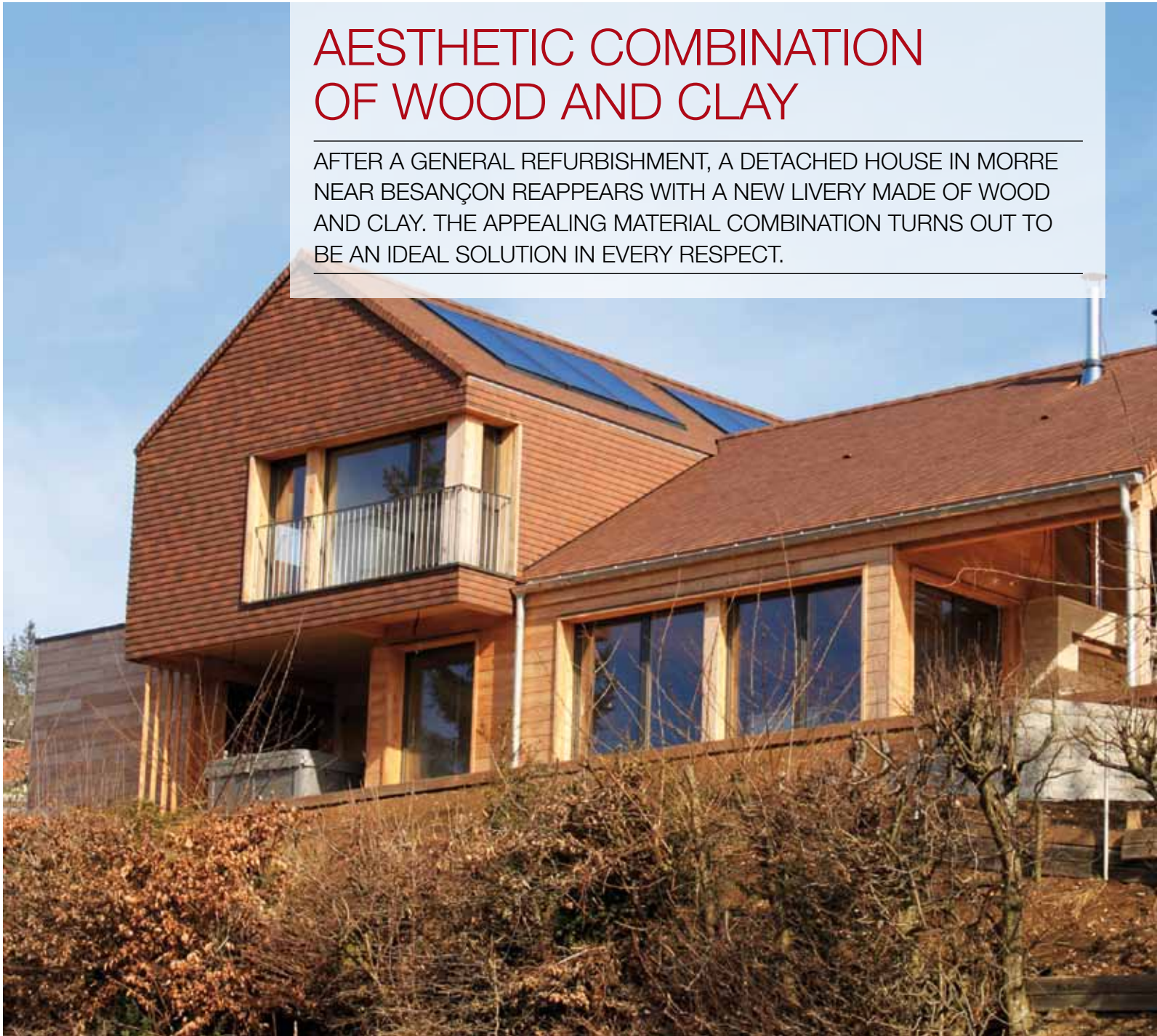
LGJ Dakwerken, Westerlo

CLAY ROOF TILES

VHV glazed, three shades of green

AESTHETIC COMBINATION OF WOOD AND CLAY

AFTER A GENERAL REFURBISHMENT, A DETACHED HOUSE IN MORRE NEAR BESANÇON REAPPEARS WITH A NEW LIVERY MADE OF WOOD AND CLAY. THE APPEALING MATERIAL COMBINATION TURNS OUT TO BE AN IDEAL SOLUTION IN EVERY RESPECT.



Energy-efficiency, comfort, aesthetics, integration into the surroundings, and respect for the environment – these were the owner's standard for the reconstruction and refurbishment of his residence. Architect Alain Brustel from Design Architecture found the solution fulfilling all the client's demands by using wood and clay roof tiles as building materials.

IN PERFECT HARMONY Construction works only spared the solid building core; the new timber structure for the roof and façade renovation creates the impression of a completely new building. Clay roof tiles in patinised brick-red – or more specifically, rectangular plain tiles laid in a cross bond formation

– were used for both gabled roofs as well as for the façade on the upper level. The larch wood cladding of the remaining façade areas and the clay material perfectly complement each other in terms of finish and natural colouring. "The shades of the clay roof tiles were selected on the basis that they will over time blend in with the cladding made of untreated larch wood. The selection of these natural building materials requiring little maintenance is also key to achieving the sustainability provided for in the context of this project" the architect explains.

The entire refurbishment was planned and executed as part of a bioclimatic low-energy concept, with the combination of wood and clay proving to be par-



Very ecology-minded and completely refurbished, this detached house presents itself in a new livery made of wood and clay. Even though the building core was maintained, the new envelope and the timber structure for the roof and façade create the impression of a new building.

ticularly efficient in addition to the materials' aesthetic quality. The large glass fronts allow the necessary solar radiation, thus ensuring a heat gain in winter. The thermal insulation consists of wood shavings; the heating system, too, is designed to use wood as fuel and it is complemented with an additional supply and exhaust air system. The result is a building in harmony with nature, which with regard to the selection of materials used gives priority to both purely aesthetic and ecological aspects.

INFO

PROJECT
General refurbishment of a detached house

CLIENT
Private, Morre

ARCHITECT
DESIGN Architecture, Besançon,
Alain Brustel

ROOFER
Simonin Frères, Montlebon

CLAY ROOF TILE
301, rustic

A MEANDERING TOWN HALL

THE DESIGN VOCABULARY AND MATERIAL SELECTION OF THE NEW TOWN HALL IN DEN BURG ON TEXEL, AN ISLAND IN THE WADDEN SEA, BEAR THE SIGNATURE OF THE ARCHITECTS ALBERTS & VAN HUUT. THIS RELATIVELY LOW BUILDING WITH VISIBLE REFERENCES TO NATURE AND THE SURROUNDINGS WAS DEVELOPED IN CONJUNCTION WITH THE ISLAND'S RESIDENTS.



Next year, the practice Alberts & Van Huut from Amsterdam will celebrate its 50th anniversary. Projects by the architectural practice show a consistent approach: nature is a constant source of inspiration. "We wanted to depict the meandering pattern of the mudflats and the dunes on and around Texel in the town hall design." The characteristic shape of sheepfolds with a steep roof inclination typical of Texel, where the ridge reaches its highest point at the front and in the middle of the building, also arouses clear associations to the new town hall. In-between, the building "meanders", both with its ridge line and with the façade segments.

IN THE INTEREST OF PARTICIPATION The experience gained in the previous twelve town hall projects motivated Alberts & Van Huut to intensively

involve the population in the design process. For the public meetings, the architects brought paper, modelling clay and paint to help the citizens express their creativity. School children from the area, too, were invited to make a contribution to the house of community, for example, by creating tile pictures, which are now in the completed building and are appreciated by all users.

STRONG LINK TO NATURE The floor plan of the town hall describes an open circle with the entrance area and the assembly hall is accommodated in the middle of the circular arch. Security and contact with the surrounding landscape were the underlying design parameters for the architects. The tall windows of the assembly hall open up an unrestricted view to the town centre of Den Burg.



Nature served as the primary source of inspiration for the construction of the new town hall, because the architects wanted to make formal references to the meandering dunes and mudflats of the surrounding landscape. Furthermore, the building was developed with the involvement of the residents.

On the inclined façades with irregular window arrangements and on the prominent roofs adjoining one another, clay roof tiles and facing bricks were used respectively as roofing and cladding material. The relatively small formats of the ceramic elements are very well suited for the unusual shapes of this project. "We like to work with roof tiles and facing bricks and we use them a lot" Max van Huut says. "They age beautifully. When these materials get dirty, they can be cleaned relatively easily, and the building looks like new. On top of that, the material is easy to recycle."

The colour of the walls is coordinated with the colours of dunes and mudflats all around. The architects opted for wine-red for the window and doorframes, to tone in with the ceramic roof elements and were refreshed with the green patinised copper details of the rainwater gutters.

INFO

PROJECT

New town hall of Den Burg on the Island of Texel

ARCHITECT

Alberts & Van Huut, B.V.,
Amsterdam

CLAY ROOF TILE

Datura, rustic engobe



A HOUSE SETS SAIL

ON AN ATTRACTIVE CORNER SITE ON THE MARKET SQUARE OF HEIST-AAN-ZEE, AN OLD CAFÉ WAS REPLACED BY A NEW MULTI-FAMILY BUILDING WITH A RETAIL UNIT, ITS PROMINENT ARCHED ROOF MAKES A PROMINENT STATEMENT.



This residential building with a prominent arched roof sets a conspicuous signal. Red plain tiles, whitewashed brickwork and grey window profiles together with architectural elements, which relate to the local tradition and which were interpreted in a contemporary style, characterise the distinctive overall impression.

The architect answered the client's request to construct a building that would be special and particularly characteristic in the specific location with a re-interpretation of the Anglo-Norman architectural style, which is typical of the area but slightly ponderous. Locally known materials such as red plain tiles, whitewashed brickwork and grey window profiles are used as predominant elements of this concept. The architect borrowed various architectural elements from local tradition and reinterpreted them in a contemporary way. Additionally, he arranged these elements in a playful, surprisingly modern composition.

A DISTINCTIVE ROOF The most prominent element of the building is the roof, which covers the longer one of the two building sides with a semicircular arch spanning from the ridge to the eave. The windows as well as two dormers and vertical strip windows are positioned in the curved roof surfaces. On the front side, the edges of the roof were designed as narrow as possible in order to create the impression of a billowing sail.

The façade section formed by the arched roof was clad with natural red plain tiles and could thus be constructed at relatively reasonable cost; additionally, it provides optimal building insulation. Arched laminated beams are fixed to the floor slabs and form the structural framework of the roof, while the corner

of the building is supported with an additional metal structure.

DYNAMIC FAÇADE Towards the south, the façade is turned towards the market square. Unlike the homogenous arched roof façade, this one is broken up with its cantilevered balconies. The balconies seem to literally project from the front side of the arched roof and give this elevation of the building a completely different dynamic. Due to their positioning above one another, the balconies act as a protection against too much direct sunlight, however they allow natural daylight to enter the rooms when the position of the sun is low during the winter months. That way, they contribute to a pleasant interior ambience. The glass balustrades of the balconies are made of etched glass panes with the intensity of the etching ranging from opaque at the bottom to transparent at the top. This solution provides an equally efficient and elegant visual protection.

The ground floor with a fully glazed retail unit located at the corner of the building forms a plinth for the three upper levels accommodating four apartments, one of which is a maisonette. A penthouse apartment with an attic room underneath the arched roof forms an exclusive termination at the top – whereas a large collecting tank for rainwater was located in the basement.

INFO

PROJECT

Retail unit and four apartments,
Heist-aan-Zee

ARCHITECT

Frederik Grimmelprez, Blankenberge

BUILDING CONTRACTORS

- Shell construction: Bouwonderne-
ming Canneyt, Oostkamp
- Roof structure: Frans Fierens,
Zedelgem
- Roofing: Dirk De Prest, Oedelem

CLAY ROOF TILES

Façade and arched roof:
301, natural red



TILED ROOF XXL

DUE TO ENORMOUS SNOW LOADS IN THE BLACK FOREST REGION, THE OVERSIZED TILED ROOF OF THE NEW “BADEPARADIES SCHWARZWALD” AT TITISEE CONFRONTED THE DESIGNERS AND BUILDING CONTRACTORS WITH EXTREME TECHNICAL DEMANDS.

Titisee ranks among the most popular destination for excursions in the Black Forest. In 2011, the area was enriched with the water park called “Bade-Paradies Schwarzwald”. Its external building shape can be clearly made out from a distance because it is practically made up of nothing but roofs. The aim was the design of a both aesthetic and durable roof, which meets the building’s extreme physical as well as structural requirements in this snowy environment. Two enormous pitched roofs made of clay roof tiles, which are positioned at a right angle to each other, provide the required cover and characterise the building with regard to its visual appearance and its construction. Using clay roof tiles, a traditional roofing material tried and tested in this area, made it possible to harmoniously integrate the complex into the local landscape despite its impressive dimensions.

TECHNICAL CHALLENGE The building with a T-shaped floor plan consists of a glass pavilion with a panoramic roof that can be opened up, a long clay

tiled roof with inclined cantilevering glass fronts at the gable ends and a central light strip, as well as a second, slightly smaller clay tile roof, which covers the glazed entrance area at the front. The surface area of the large roof measures about 4,000 square metres and spans across the water slide paradise. The dimension of the enormous roof landscape, however, also demanded the implementation of special technical solutions, because the trapezoidal roof structure made of laminated wooden beams supports not just the roof load but also a majority of the slides suspended from them.

BRAVING WIND AND ICE Extreme snow and ice masses of up to two metres are not uncommon in this region of the Black Forest. Primary importance was therefore attached to a winter-proof design. The so-called “Reformziegel” clay tile by Wienerberger was used in the red engobe colour for the roof. Furthermore, the new model is equipped with the integrated “SturmFIX” fixing system. The oversized roof areas



Large tiled roofs require special solutions: in the winter of 2011/2012, snow and ice accumulated along the eaves to a height of about seven metres. About 6 tons of snow per running metre of eave in extreme cases must be expected. Consequently, snow guards were not used at all for these clay tile roofs with very long rafters. Snow can slide down unrestrictedly. Photo at the top: The roof drainage is done with large paved gutter channels laid out all around the building.

have mastered the first storms and the seven metres of snow and ice, which accumulated in the winter of 2011/2012 along the eaves, without any difficulty. The consistent all-ceramic detailing of the large roof areas was developed in close collaboration between the designers, the involved craftsmen's businesses as well as the expert service consultants from Wienerberger. Many features implemented in this roof are based on old building knowledge developed in the area, which proved to be successful with this roof.

INFO

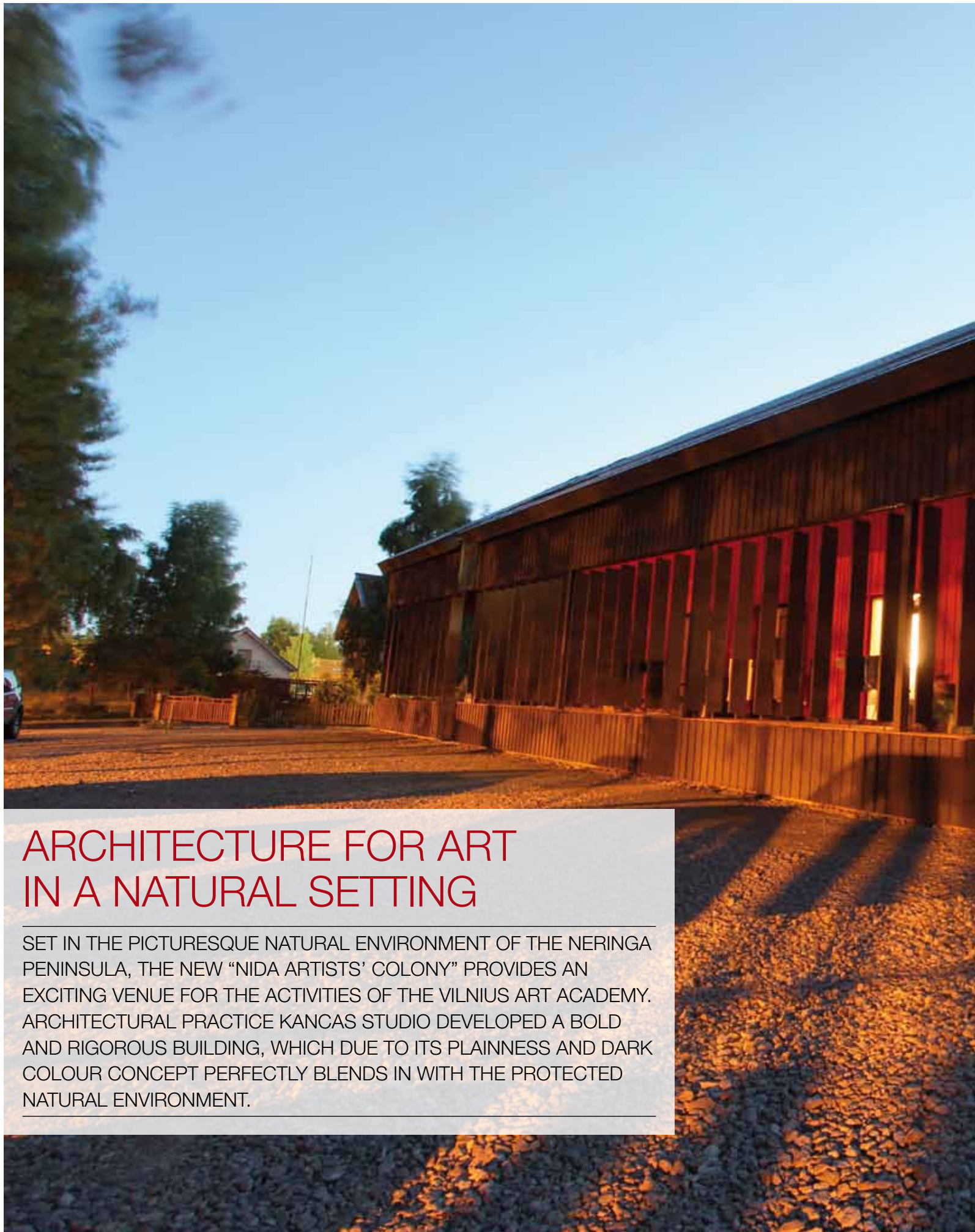
PROJECT
Badeparadies Schwarzwald Titisee

CLIENT
WUND Gruppe, Friedrichshafen

STRUCTURAL ENGINEER
Holzbau Amann GmbH,
Weilheim-Bannholz

ROOFER
Rudi Metzler GmbH, Hinterzarten

CLAY ROOF TILE
Cosmo 13 S, red engobe



ARCHITECTURE FOR ART IN A NATURAL SETTING

SET IN THE PICTURESQUE NATURAL ENVIRONMENT OF THE NERINGA PENINSULA, THE NEW “NIDA ARTISTS’ COLONY” PROVIDES AN EXCITING VENUE FOR THE ACTIVITIES OF THE VILNIUS ART ACADEMY. ARCHITECTURAL PRACTICE KANCAS STUDIO DEVELOPED A BOLD AND RIGOROUS BUILDING, WHICH DUE TO ITS PLAINNESS AND DARK COLOUR CONCEPT PERFECTLY BLENDS IN WITH THE PROTECTED NATURAL ENVIRONMENT.





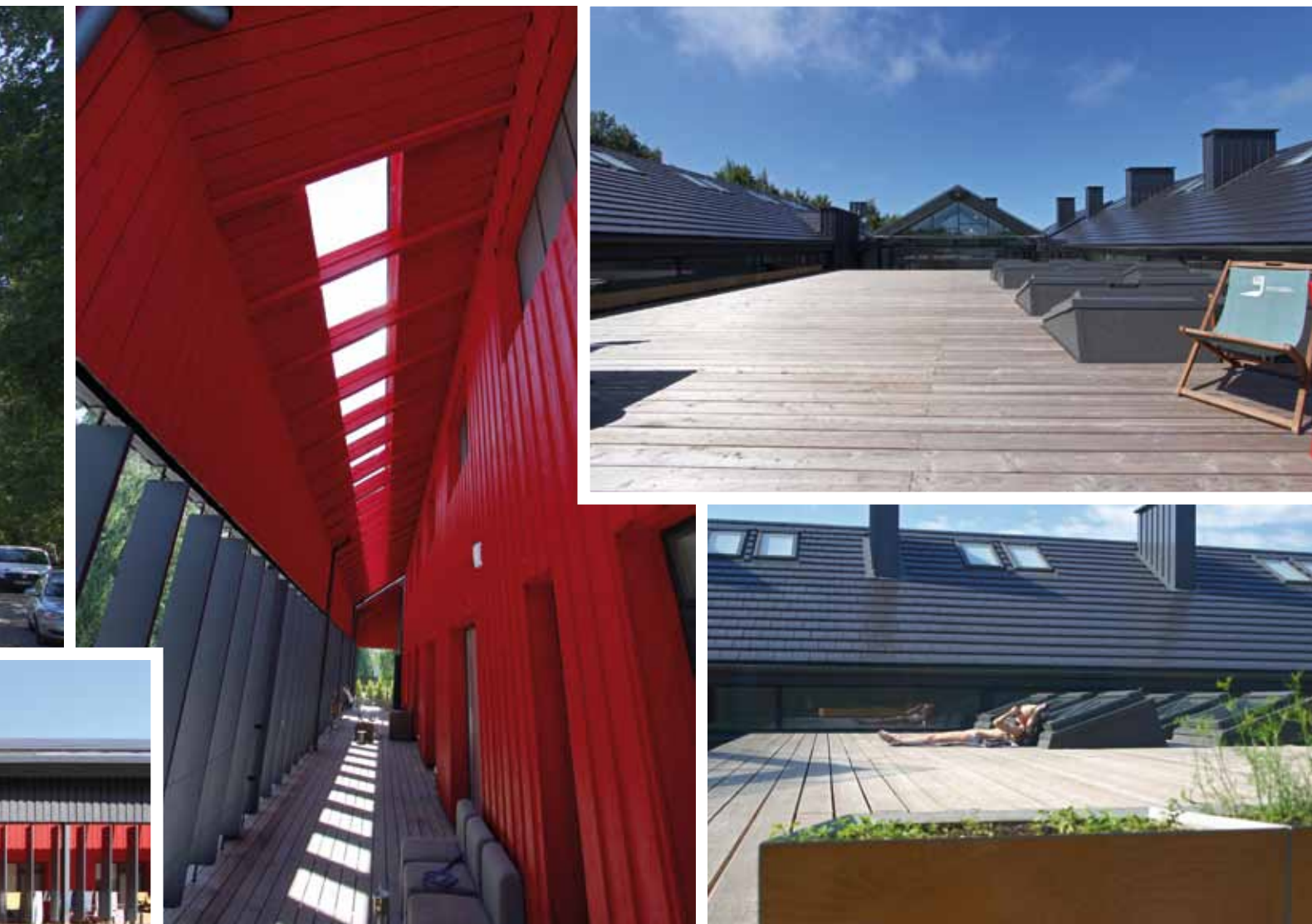
Since the 19th century, Nida, a small fishermen's village, has developed into a popular summer residence for artists. Painters, actors, writers, and philosophers have been attracted by the pristine landscape between white dunes, the sea and pine woods and they have travelled to this remote location from all of Europe.

ARTISTIC AURA WITH FRESH MOMENTUM The new complex of the "Nida Artists' Colony", a subsidiary institution of Vilnius Art Academy, was recently built here following on the artistic tradition of this location, and now it gives this venue a fresh impetus. The new building accommodating five artist's studios, students' dormitories and a multipurpose hall was erected on the old foundations of a warehouse dating from Soviet times. The purpose of the new complex

is to host a variety of events including conferences, seminars, art festivals, and exhibitions and provide a creative environment for art students, professors and artists in dialogue with the public.

The large two-storey timber building is divided lengthwise into three sections of the same size, which are each covered with clay roof tiles. At first glance, the resulting impression is that of three terraced houses rather than that of an event centre; this was a deliberate act to reduce the scale and create a homely atmosphere.

PRECISE ARCHITECTURAL VOCABULARY On closer examination, however, a sensitively elaborated building emerges, which with its clear floor plans and its plain external appearance makes use of a precise architectural vocabulary. Not least, the same dark



As visitors on the open-air terrace are at eye level with the roof areas, the detailing of the tile had a great visual importance. The zinc-red colour characterising the underside of the eaves as well as the walls of the entrance façade adds vibrant contrasts. The cantilevered roof and the vertical elements create a shady veranda, which invites people to relax.

grey shade chosen for the timber walls and the roof tiles makes the building look composed and monolithic.

A generous, central wooden terrace, which is recessed into the middle one of three pitched roofs on the first floor, is available for contemplative moments. As visitors are standing on a level with the surrounding roof surfaces in front of their eyes, great importance was assigned to the selection and detailing of the roof tile. A slightly glossy clay roof tile was chosen, which gives the roof surface vividness as its colour varies according to lighting conditions.

Two semi-public walkways divide the building crosswise into three areas of different sizes. A walkway partly surrounding the building provides another connecting zone between the interior and exterior; this passageway also includes the entrance façade,

which is designed as the most distinct detail of the entire building. Here, the rear façade level, where the entrance doors and undersides of the eaves are positioned, is painted in a vibrant red. On the façade level in front, narrow vertical wooden slats create an arcade-like effect. The long and narrow red-lined foreground created here allows associations to a Buddhist temple complex.

With the construction of this modern project in a protected natural environment, the client, Vilnius Art Academy, sets an important example in contemporary architectural history.

INFO

PROJECT
Nida Artists' Colony

ARCHITECTS
Kancas studio – Algimantas
Kančas, Tomas Petreikis, Gustė
Kančaitė, Tomas Kučinskis

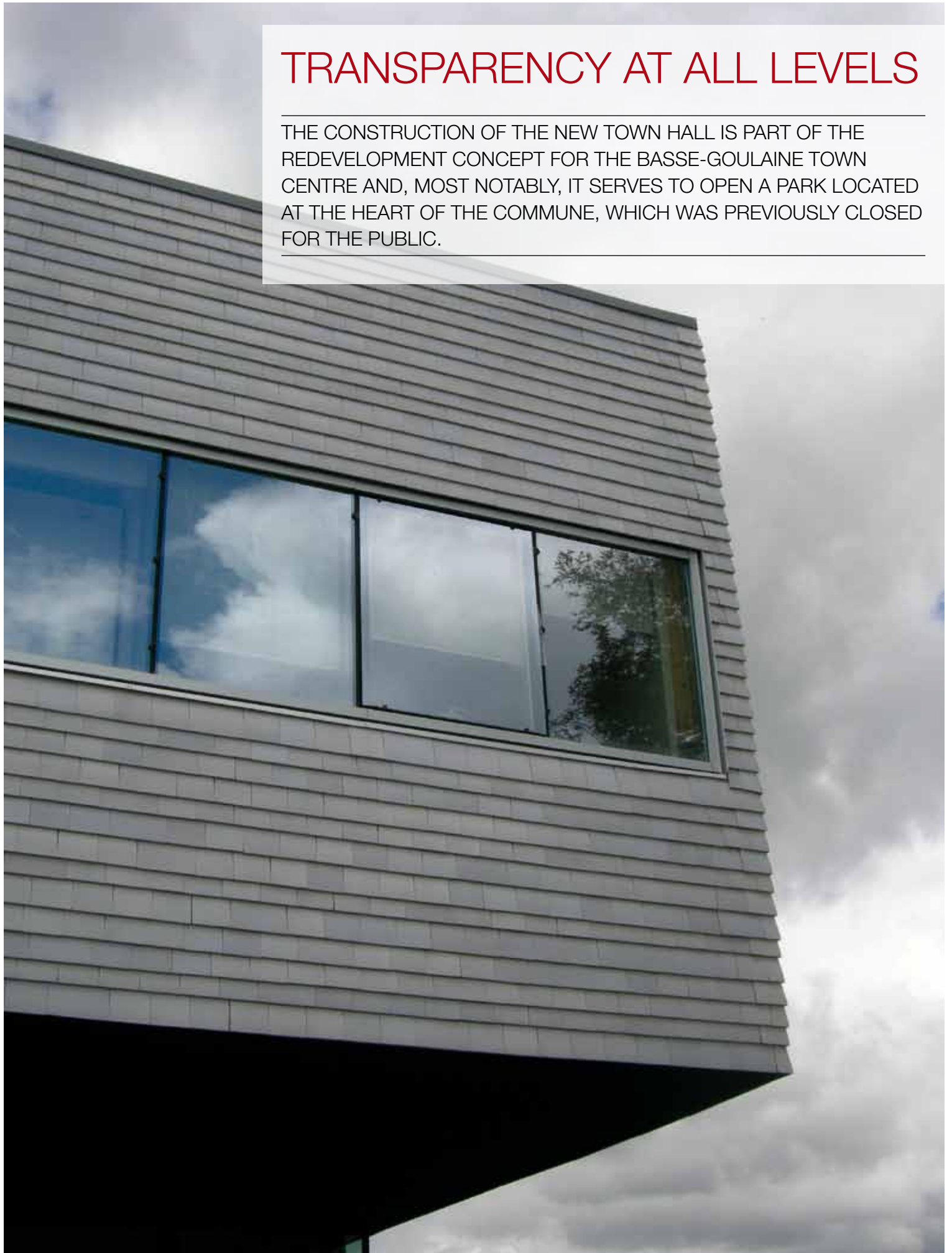
CLIENT
Vilnius Art Academy

CONTRACTOR
UAB Rekosta

CLAY ROOF TILES
Actua 10, dark grey

TRANSPARENCY AT ALL LEVELS

THE CONSTRUCTION OF THE NEW TOWN HALL IS PART OF THE REDEVELOPMENT CONCEPT FOR THE BASSE-GOULAINÉ TOWN CENTRE AND, MOST NOTABLY, IT SERVES TO OPEN A PARK LOCATED AT THE HEART OF THE COMMUNE, WHICH WAS PREVIOUSLY CLOSED FOR THE PUBLIC.





Thanks to its clean design vocabulary, this commanding three-storey town hall perfectly integrates into its natural environment. Although the plain tiles used for this building are a traditional material, here they prove that these tiles are a perfect solution not just for roofs but also for modern applications on contemporary façades.

The design by DLW architecture from Nantes is based on transparency and the accessibility of the new town hall for all citizens. Thanks to its clean design vocabulary, this commanding three-storey town hall perfectly integrates into its natural environment. The compact upper level, which is clad with light plain tiles, seems to hover above the fully glazed ground floor; visual links between the town and the park, between the interior and exterior make the building a transparent connecting link in both the political and urban context.

OPENING UP TOWARDS THE TOWN Following the site contour, about one half of the semi-basement was embedded in the ground, while its façade opens up this level towards the road and is thus providing a direct access to the road for the municipal employees working in the offices. This fully glazed level seems to have grown into the park. It is dedicated to welcoming the public and also provides rooms for official occasions. The upper level is reserved for in-house departments of the municipal authorities. The solid

façade, which is clad with light plain tiles, offers more secluded areas, and a large terrace with a glass balustrade faces towards the park.

ATTRACTIVE MIXTURE The entire building is designed as a mixed construction of solid concrete components and a timber framework. In combination with glass and shimmering light-grey plain tiles, which due to their thin glaze reflect a variety of shades, the result is an extremely modern and high-contrast material effect. The selection of the tile was guided by considerations of the traditional building technique from the South Loire Valley, where plain tiles are still frequently used. Beyond the elegant visual effect, the building with an effective floor area of 1,500 square metres also meets low-energy building standards.

INFO

PROJECT
New town hall of Basse-Goulaine

ARCHITECT
DLW architecture, Nantes

CLIENT
Municipality of Basse-Goulaine

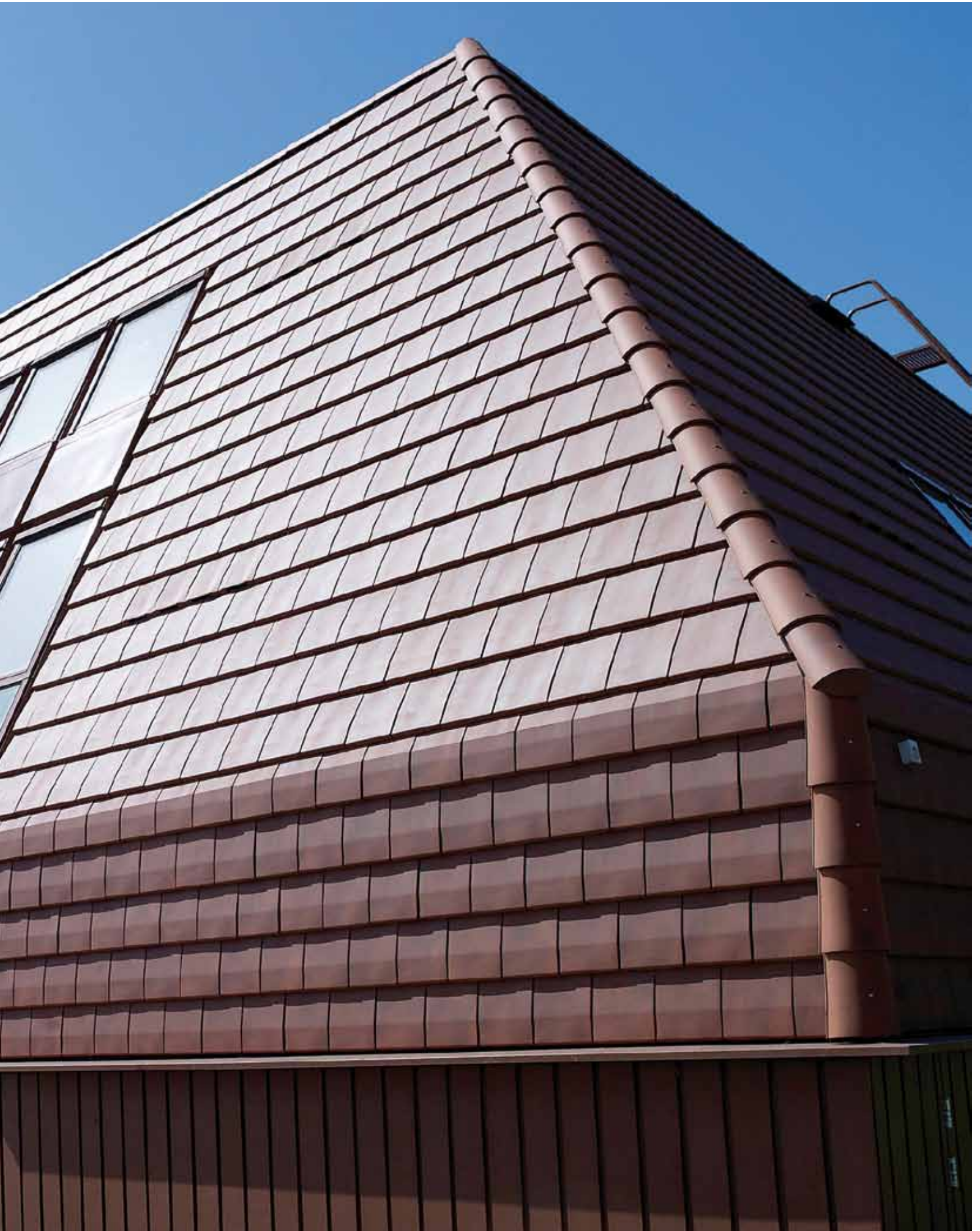
CONTRACTOR
SMAC, Nantes

CLAY ROOF TILE
301, white glazed

LIVING AND WORKING IN THE BARN

IN AN OLD CHERRY ORCHARD IN THE DUTCH TOWN OF LEIDSCHÉ RIJN, THREE NEW, DISTINCTIVE RESIDENTIAL BUILDINGS FOR ARTISTS WERE CONSTRUCTED. WITH ITS RATHER UNCONVENTIONAL DESIGN, ARCHITECTURAL PRACTICE ONB RELATES TO THE AGRICULTURAL PAST OF THE LOCATION, BECAUSE THE BUILDINGS HAVE THE SHAPE OF AN ABSTRACTED BARN.







“You do not build a standard terrace house in order to convince artists to move to Leidsche Rijn”, Lars Zwart from Op ten noort blijdenstein architects (ONB) reckons. Therefore, the buildings are anything but mediocre: the ground floor provides a large studio for every resident, whereas the living quarters are on the two upper levels. The shared foyer undeniably is the showpiece: it is three storeys high and is well illuminated by a narrow roof opening. From here, all doors open up towards the individual studios. On top of that, this common room offers the artist the opportunity to jointly exhibit their works of art.

ARTISTIC UNITY In order to give the buildings the appearance of an authentic barn, the exterior of the houses are finished with one colour only, which, in turn, was determined by the colour of the clay roof tile. The relatively flat tiles, which cover the roof sur-

faces like a sheet, greatly appealed to the architects for their abstract design. Only the framing of the main entrance was allowed to feature a different colour. The large doors with their striking leaves are painted white and are thus an eye-catcher on the very solid-looking wooden front. The numbers one, two and three on the doors are deliberately oversized in order to round off the quite artistic overall impression of the entrance area.

The clay roof tiles of the extended roof, the wooden façade as well as the aluminium window- and door frames form a solid unity in terms of both colour and space. The roof structures of the buildings were visually enlarged by continuing the clay roof tiles used for the inclined roof area on the vertical areas covering part of the façade. A tile glued with Koramic multifix was used to produce a flowing transition; and the window frames in the façade also extend to the roof area.



Three artist's residences that are characterised by their very low extended roof surfaces impress with their exceptional exterior: formally, the architects deliberately referred to the barns typical of the location and created elongated buildings, which can be distinguished from one another especially by the different colours of their roofing material. Clay roof tiles proved to be a perfect solution for the slightly unconventional contemporary concept.

"The residents are proud of the complex, and that is the best compliment you can get as an architect" Zwart says. "The great thing is that every one of the residents gives the room its very own atmosphere and furnishing. The common area is also very well accepted, exhibitions are organised at regular intervals. And the cherry orchard blossoms!"

INFO

PROJECT

Studio apartments, Leidsche Rijn

ARCHITECT

Op ten noot Blijdenstein Architecten en adviseurs,
Utrecht

CLAY ROOF TILE

Actua, dark grey, nuanced and slate engobe

INDUSTRIAL BUILDING REUSED

THE CENTREPIECE OF A PRIVATE GATED DEVELOPMENT OF EIGHT BESPOKE PROPERTIES, THE “OAST COURT FARM”, IS A BRAND NEW OAST HOUSE, WHICH STANDS OUT DUE TO ITS THREE ROUNDELS TOPPED WITH CONICAL WHITE COWLS.





Finding the most appropriate tiles for such a prominent building task was essential for the client: "The patinised shades of red and black blend in with the overall colour concept and perfectly reflect the heritage of the property. Additionally, the Alban tiles provided us with a durable and cost-effective solution." The varied surface texture was created using recycled foundry sands, on the one hand, and the handcrafted nature of the production process, on the other.



The County of Kent in the South-East of England is, amongst other things, widely known as a hop-growing region. Former oast houses – buildings which were traditionally used for drying hops as part of the brewing process – are today seen as a landmark of the region. In recent times, many of these redundant industrial buildings have become popular conversion projects as they can create unique, residential properties. One of them is the "Oast Court Farm" project in East Malling, which has been converted into an exclusive gated community.

LIVING IN ROUNDELS Taking reference from the vernacular architectural tradition, eight properties were constructed around a centrepiece of three roun-

dels on the site of the historic oast house. The former exhaust air shafts of the oast houses are clearly visible from afar as typical white roof structures. Three distinctive roundels are called "The Offham"; as the luxurious unit of the overall complex, they accommodate five bedrooms. Despite their traditional outward appearance they are equipped with most modern facilities and are fully furnished.

As the three roundels topped with conical cowls are such a prominent part of the property and considering their historical importance, special attention was given to the roofing. Clay plain tiles with a patinised look were used. The rustic appearance and surface texture is created by the handcrafting process and the addition of recycled foundry sands.

INFO

PROJECT
Oast Court Farm development,
East Malling

CLIENT
Hillreed Residential Developments
Ltd

ROOFER
Russell and Russell Roofing

CLAY ROOF TILES
Alban, Sussex Blend



AZURE BLUE VIEW INTO THE FUTURE

ON THE SITE OF A FORMER MINE, THE MUNICIPALITY OF HOUTHALEN-HELCHTEREN CONSTRUCTED AN ADMINISTRATIVE CENTRE, THE LONG-TERM AIM OF WHICH IS THE REDUCTION OF CO₂ EMISSIONS BY 90%. THIS AMBITIOUS AIM IS SYMBOLISED BY AZURE BLUE CLAY TILES COVERING THE VIEWING TOWER.



Sustainability in every respect characterises this prominent building: a draught-free building envelope, triple glazing, adjustable blinds, mechanical ventilation with heat recovery and thermal heat pump, roof gardens, and energy-efficient lighting are complemented with a distinctive symbol visible from afar: a flat azure blue clay roof tile.

The elegant tower marks the entrance to the 17,000 m² building. It also serves as a reminder of the former cooling towers of the mine, which used to store cooling water for the power station. The azure blue colour of the clay roof tiles used as wall cladding of the tower blurs the boundaries between the tower and the sky. The organically undulated theme, the underlying principle of the overall architecture, shows to advantage in the tower and the design of its cladding. The roofing contractor clad a surface area of no less than 770 m² with plain tiles, a job that came to a good two months' work when including the preparatory work.

COMMENDABLY SUSTAINABLE The tower is topped with a viewing platform with a distinctive, elliptical opening. Here, the gaze is deliberately drawn to the former main building of the mine, which was renamed "GreenVille" and now accommodates the principal office of the non-profit organisation I-Clean-Tech Vlaanderen. The look-out post was nicknamed

"The Eye of Daubechies" after Ingrid Daubechies; the mathematician and physicist, who was born in Houthalen-Helchteren, was one of the originators of wavelets, the mathematical formulae underlying the JPEG format.

The new administrative centre is significant in many ways. To start with, the realisation should be a prime example of an integrated design and construction process. The CO₂ footprint of the municipal services was also examined during the design phase, with calculations of what the figures would be after the relocation. Another striking feature is that space was provided for catering uses so that the building will be able to generate revenues in the longer term.

The building is based on a strict sustainability concept, which is reflected in numerous aspects including the considerate material selection, with the most visible symbol being the clay roof tiles of the blue tower – the landmark feature of the administrative centre which is visible from afar.

INFO

PROJECT

Administrative centre (NAC),
Houthalen-Helchteren

CLIENT

Municipality of
Houthalen-Helchteren

PLANNING TEAM

Design: THV Mandala – Holistic
Architecture 50 | 5
Engineering: Arcadis
General contractor: Cordeel &
Kumpen
Coordination: Creando

ROOFER

Unidak, Hasselt

CLAY ROOF TILES

Aléonard Patrimoine, blue glazed



AWARD-WINNING HOTEL IN A HERITAGE-PROTECTED CASTLE

THE KRASICKI HOTEL IS ACCOMMODATED IN A PART OF THE SPLENDIDLY REFURBISHED WARMIAN BISHOP'S CASTLE DATING FROM THE 15TH CENTURY, WHICH IS LOCATED IN THE NORTH-EAST OF POLAND. THE HOTEL ALONG WITH THE BISHOP'S CASTLE AND THE MUSEUM OF WARMIA FORM A UNIQUE CULTURAL AND ENTERTAINMENT CENTRE.



The heritage conservation authority required the roofing to be renovated as closely to its former design as possible. Only high-quality clay roof tiles met these requirements and ensured that the refurbishment was a success.

Photo top right: The moat is an attraction for visitors; a bridge stretching across leads to the hotel.

After the castle complex had been neglected and abandoned to dilapidation for many years, it was refurbished in 2010 and 2011. Restoration of one of the most valuable and listed heritage sites in Warmia was quite a challenge for the architects as well as the contractors. Using the highest quality materials, the architects from Dżus GK Architekci carefully designed all new buildings and conversions down to the last detail. Shortly after its completion, the Krasicki Hotel was selected from several hundred competitors as the winner of the main prize in the "International Hotel Awards" in the "Best New Hotel Construction and Design" category.

REINTERPRETED ARCHITECTURAL-HISTORICAL QUALITY The medieval outer buildings previously accommodated, amongst other things, the baroque palace of Bishop Grabowski, a 14th century salt depot and a gunpowder tower. The restored buildings were partly converted into a hotel complex, which is made up of three wings laid out around a square inner courtyard. Each wing was meticulously renovated in accordance with the original architectural style, so that the guests can choose between rooms in the Gothic or the baroque wing. The special interior design makes the hotel a place where "the past merges with the present and the art of life with the art of hospitality", the architects explain, who have

added modern elements with great skill, while at the same time delicately emphasising the building's historical character.

THE ART OF REFURBISHMENT Modern furniture, contemporary lighting, luxurious and elaborately designed bathrooms contrast with the old brick and stone walls of the existing buildings to give the entire interior design concept a very special atmosphere.

Exclusive restaurant areas, an observatory, an extensive library and, as the core of the ensemble, an attractively designed spa area additionally upgrade and complement the hotel. The 18-metre swimming pool, a conference room and a wine cellar are all accommodated underground. An additional attraction is the moat, which guests have to cross via a bridge to get to the hotel. Water from the nearby river Symsarna feeds this moat, and boats are available for a short cruise on the water.

Clay roof tiles were used for the renovation of the roof because the heritage conservation authority required a reconstruction as close to the original design as possible. This particular clay roof tile was the only product that met the specified requirements. A large part of the roof was covered with natural red "Cavus 14 hollow tiles", while Monk & Nun tiles of the same colour were selected for the keep.

INFO

PROJECT
Hotel Krasicki, Lidzbark Warmiński

CLIENT
Anders Group

ARCHITECT
Dżus GK Architekci Atelier

GENERAL CONTRACTOR/ROOFER
Iławskie Przedsiębiorstwo

CLAY ROOF TILE
Cavus 14 natural red &
Monk & Nun tile natural red

CLAY-COLOURED URBAN IMPLANT

THE NEW PUBLIC LIBRARY IN ANYKŠČIAI RESTORES THE SPATIAL HARMONY OF THE MAIN SQUARE, WHICH HAD BEEN WRECKED BY URBAN INTERVENTION IN SOVIET TIMES, AND CREATES A COHERENT WHOLE CONSISTING OF THE SQUARE, THE RIVERSIDE AND THE HISTORIC CHURCH.



The town of Anykščiai enjoys the fame of being the cradle of Lithuanian literature. For the great Lithuanian poet Antanas Baranaukas and his nephew, writer Antanas Vienuolis, the picturesque landscape between the river Šventoji and the surrounding woods was a source of inspiration. Today, monuments on the square in front of the church and on the adjacent riverside remind visitors of both writers. The impressive 19th century brick church and the main square that is set into the green slope of the riverside form the heart of Anykščiai's old town.

HARMONIOUS BALANCE In Soviet times, the harmony of this composition was disturbed. The quarter located behind the church was demolished and replaced by bland commercial and administrative buildings, ignoring any traditions of scale or architectural style of the old town. The population considered the orientation of the backyards of the new complex

towards the church as an additional affront. With the discreet composition of his concept for the new public library, architect Vytenis Daunoras has now achieved a renewal of the former balance.

The building consists of three sections, which integrate into the context of the square like the segments of a snake and provide a perfect urban boundary. The single building sections are very well proportioned; at first glance, they seem to consist of nothing but clay and glass.

BRICK AS COMMON THEME Brick-red ceramic elements were used for both the roofs as well as the façades. The roof, in particular, was constructed with a straight-cut, red engobed beaver tile. Glass strips with an irregular conical shape, which were inserted along the roof, the eaves and vertically on the façade, ensure natural lighting, while glazed corridors connect the three parts of the building. "The brick-red



The new public library building, which creates a coherent whole between the square, the riverside and the historic church, succeeds to restore the destroyed harmony of the former main square. The building with three volumes discreetly integrates into the existing context of the square and provides a perfect urban boundary.

colour of the roof is a reference to the church and the remaining historic buildings in the town centre" architect Daunoras says. "When overlooking Anykščiai from the top of the church tower, the library merges harmoniously with the existing buildings of the old town and their roofs, which create a dotted pattern of similar colours and materials". The library not only achieves an upgrading of the square and its surroundings in terms of its architecture and town planning, it also fulfils a substantial social function. Besides being a place where one can read or borrow books, the new library is an important meeting place for various age groups and has developed into a vibrant centre of public life.

INFO

PROJECT

Anykščiai Public Library

ARCHITECTS

Institute of design and restoration+
Architect Vytenis Daunoras

CLIENT

Municipality of Anykščiai

CONTRACTOR

Dailista

CLAY ROOF TILES

Beaver tile, straight-cut, red engobe



THE LONG ROAD OF BECOMING A MASTER

SINCE 2005, THE POLISH ROOFING FEDERATION HAS HELD THE "CHAMPIONSHIP OF YOUNG ROOFERS" IN THREE CATEGORIES. THE WINNERS ARE ENTITLED TO REPRESENT POLAND DURING THE WORLD CHAMPIONSHIP OF YOUNG ROOFERS IN LUCERNE (CH). WE INTERVIEWED THE YOUNG ROOFERS WINNING THE SIXTH CHAMPIONSHIP IN THE PITCHED ROOF CATEGORY.



How long do you have to work as a roofer in order to achieve your level of craftsmanship?

Emilian Białczak: That depends on personal abilities; I've been working as a roofer for five years. Unfortunately, you also meet roofers, who have not acquired the necessary skills despite many years of work.

Paweł Roszman: I have been working as a roofer for about three years, but already as a teenager I imagined my future to be exactly like this. I have this profession in my blood, and there is also the fact that my dad has been running a roofing company for 20 years.

What made you start thinking of competing with the best roofers in the world? How did you have to prepare for this competition?

E. B.: The willingness to compete and to be the best should be inherent in the practice of every profession. For us, the most accurate

and the best performance of the task count in the competition. Our team consists of experienced professionals, and we had planned a strategy for the championship.

P. R.: Participating in the championships is a family tradition. My brother has represented Poland in international competitions previously, now he is the mentor of our team. The goal in a championship is to construct a roof mock-up as precisely as possible; taking into account the time required for completion. We prepared ourselves for the contest for 2 weeks, practicing on a roof prototype.

What does your typical working day look like? What is your ideal investor like? What kind of architects do you appreciate most?

E. B.: During the building season we work very hard. Unfortunately, we depend on the weather. As for the ideal investor and architect, this is a topic for much debate. However, the

most important thing is that the investor fulfills his obligations, and the architect is mindful of the feasibility of his concepts.

P. R.: The roofing materials we use every day are far more complex than the ones we deal with during the competition. Additionally, we must be able to solve unforeseen problems that we encounter quite often. From my point of view, the ideal investor is one who works closely with us as the professionals supporting his project.

Pitched roofs are your specialty. What is your secret as "Young Polish Champions", and how can you recognise the ignorance of a subcontractor – that is to say, what are his most frequent mistakes?

E. B.: It's true, pitched roofs are our specialty – that's why we competed in this category during the Polish Championship - but in our everyday work we mainly have to deal



Photo above: The selected winners of the "2012 Championship of Young Polish Roofers" Emilian Białczak (front row centre) and Paweł Roszman (front row left) demonstrated all their skill with full-hearted commitment during the competition. (photo on the left).

with many different types of roofing. As for our secret, the answer is simple: the key to our success is that we enjoy what we do.

P. R.: First of all, the roof must be constructed according to good roofing practice. A subcontractor who doesn't know all about his work will tile a roof wrongly and unaesthetically; other technical mistakes will come to light over time.

Let's take a look at the general performance of roofers in Poland: Is there still a lot to do, or are you still considered as super-professionals? Who is your personal master?

E. B.: There is still a lot to do within the roofing industry in Poland. First of all, we should preferably get rid of pseudo-professionals. It is also necessary to encourage professionals to stay in Poland, because unfortunately, many of them go abroad. For me, the master is my father, also a roofer, but as yet, I can't hold a candle to him.

P. R.: A good roofer doesn't rest on his laurels, but tries to obtain new skills and knowledge all the time in order to be able to use technologically innovative materials. My master is my father, too, who passed on to me the roof know-how I have today.

Have you worked with clay roof tiles before? Are clay roof tiles a demanding material?

E. B.: The roofing material used during the championship was pre-determined, but I think

it was a good choice. Clay roof tiles are an incredibly demanding material, but the final result is splendid!

P. R.: In my opinion, clay roof tiles are not particularly demanding when compared to other roofing materials.

If you would have to choose a roofing tile from the Wienerberger product range to work with for the rest of your life, which one would be your choice? What is your favourite tile and why?

E. B.: I would choose the beaver tile, because I think it is the best and most elegant of all tiles.

P. R.: I also appreciate the beaver tile very much; it is very pleasant to work with.

What should be taken into consideration when choosing roof tiles, and what are the three golden rules of the "Young Polish Champions"?

E. B.: The selection of the roofing material is a personal decision of each client; it depends on personal taste and financial means. There are certain features that must be taken into account, such as the material the roof tile is made of, its coating and the length of the manufacturer's warranty period.

P. R.: First of all, you have to pay attention to the strength and lifespan of a tile as well as the way and ease of laying.

The young roofers work for roofing companies in the Province of Pomerania.

INFO

The companies the "Champions of Young Polish Roofers" work for:

Mr-Dach Maciej Roszman
84-215 Gowino k. Wejherowa
www.mr-dach.pl

Zakład Blacharsko-Dekarski Ogólnobudowlany Andrzej Białczak
84-242 Kębtowo Gm. Luzino



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for Roof and Façade Architecture
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