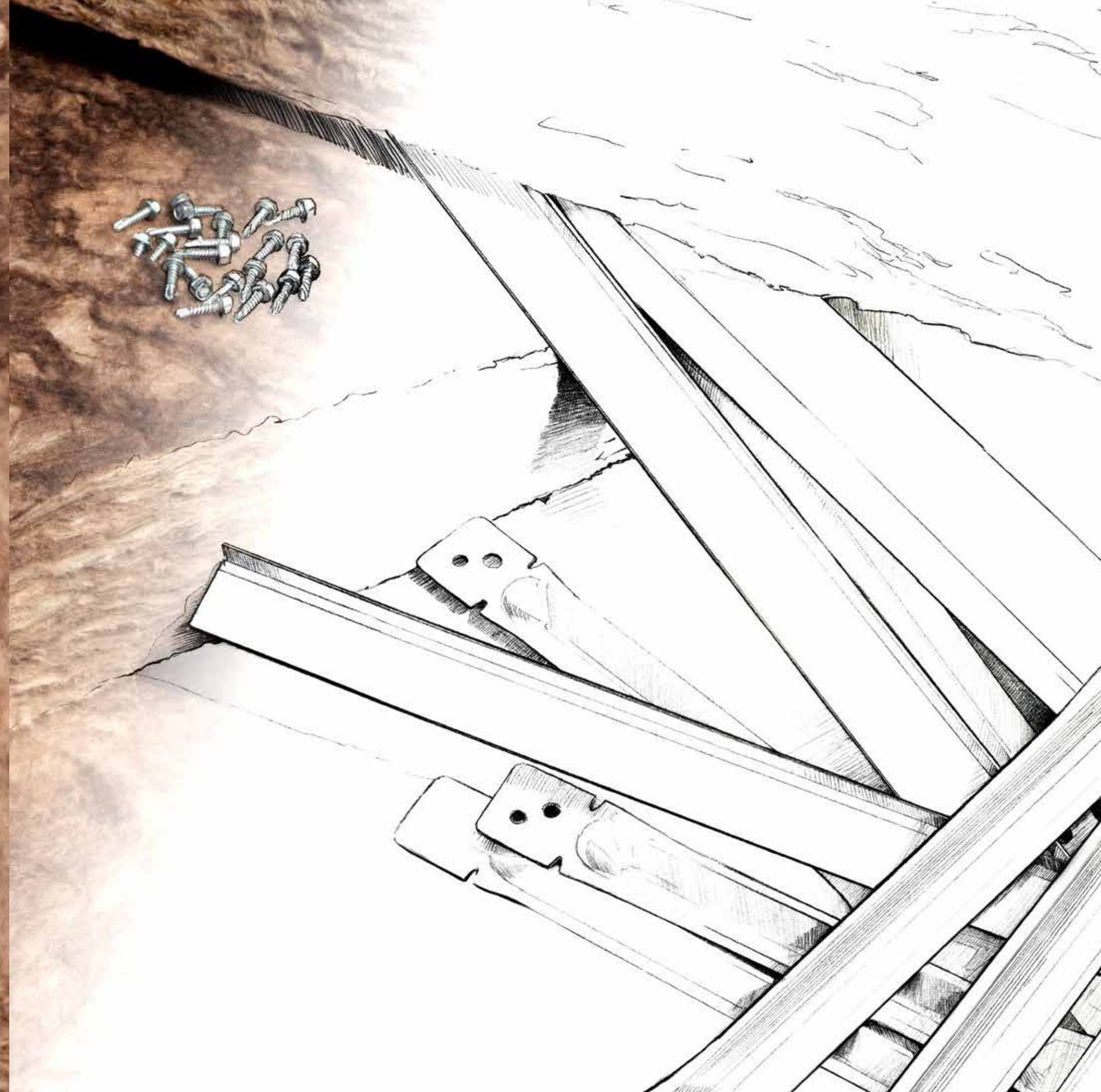


# ***KNAUF***FORBOND

***KNAUF***INSULATION

VENTILATED FACADES





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# PUBLIC BUILDINGS



# UBLIC BUILDINGS

Ventilated facade is a modern method of thermal insulation of buildings. Compared to ETICS, it offers a much wider range of external finishes from wooden boards through tile strips, thin-layer plasters, various panels, cassettes and lamellas to the unique Heraklith. Ventilated facade provides an architect a considerable amount of freedom in facade design.

The specifier will appreciate the highest possible degree of water vapor condensation resistance. The ventilated air gap allows air humidity to be actively ventilated from the surface of the insulant.

For a construction company, it is important that the installation is quick and weather-independent. Unfortunately, contact facades can be very sensitive to high or low temperatures and high air humidity.

The support grid can be easily levelled during application. In the case of contact facades, the equalization of the substrate is sometimes quite complicated.

The investor is not only interested in architectural design, but also in protection against noise and overheating of the interior.

Homes insulated with a ventilated facade are better protected against overheating of the interior than other systems. On hot days, the insulation is in contact with the air that flows in the air gap and can have a temperature of up to 30 °C. In the contact facade, however, the insulation is in contact with a render, which can be heated to 80 °C.

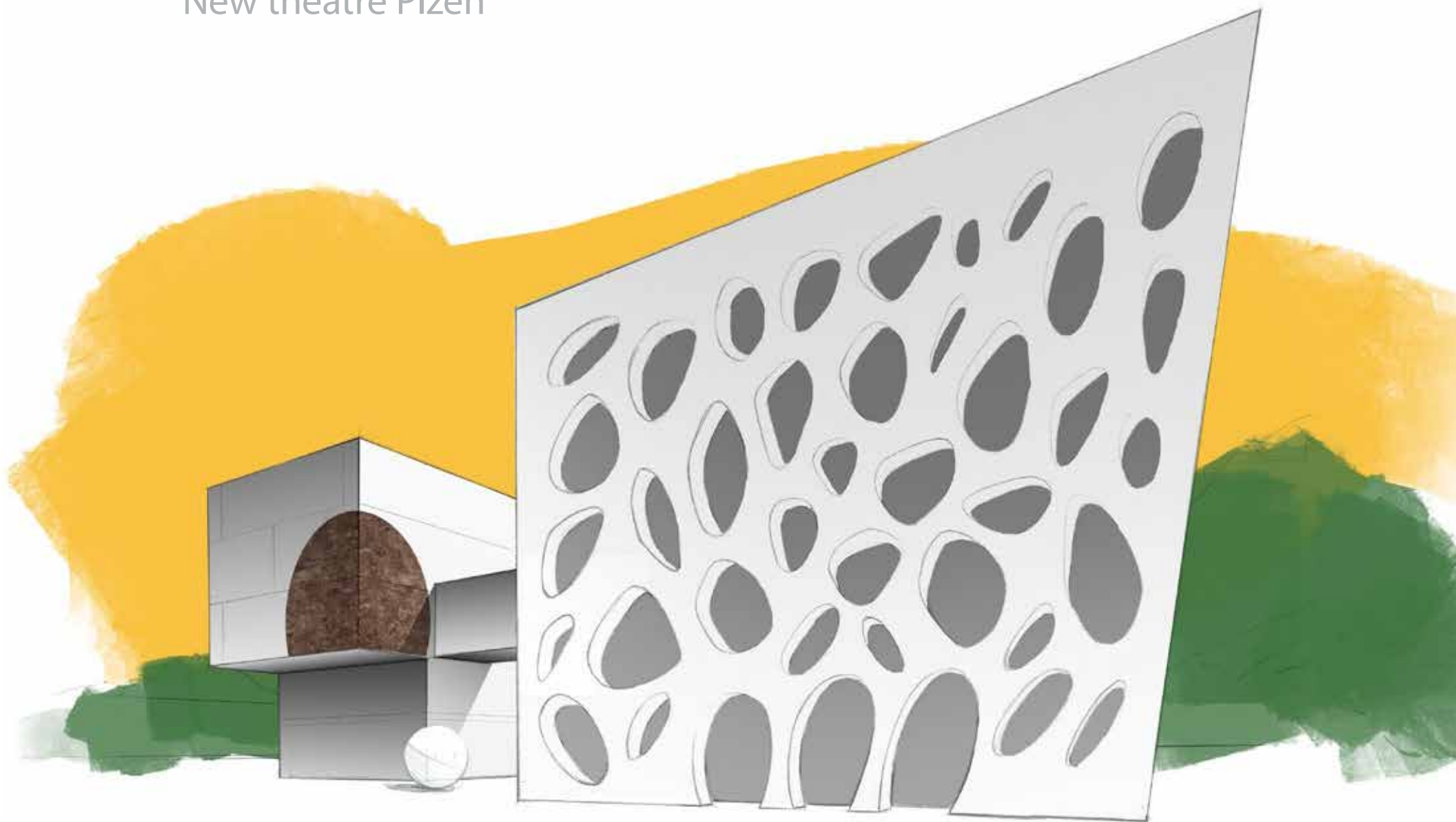
The ventilated facade has a significantly higher sound insulation than the contact facade. The front layer of the ventilated facade vibrates independently of the substrate, and the noise is attenuated by the air gap. The high acoustic absorption of mineral wool has a positive effect on airborne sound reduction too.

Fire protection is provided by the non-combustible mineral wool in combination with a metal support grid and a non-flammable lining.

On the following pages, you will discover only a fraction of the possibilities offered to you by ventilated facade design.



## New theatre Plzeň



Place:

Plzeň

Architect:

Vladimír Kružík, Tomáš Lapka, Libor Křišťůfek, Jindřich Smetana

Studio:

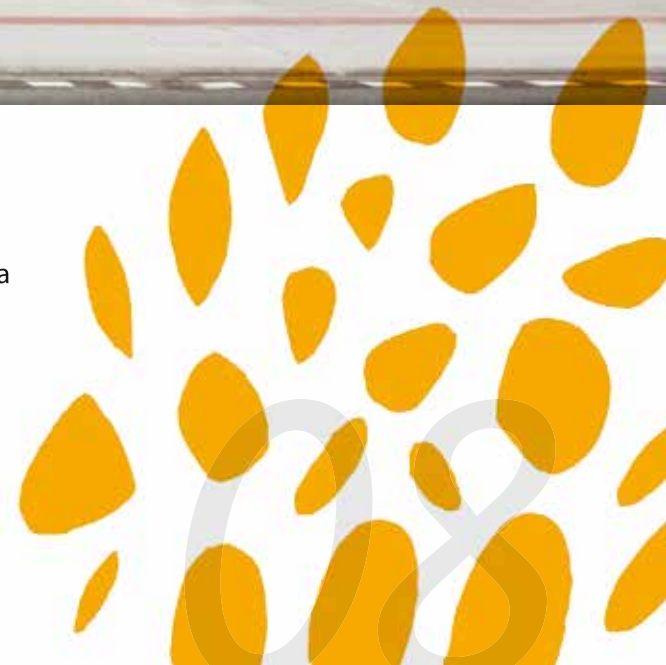
Helika, Anima a Contemporânea Lda

Photographer:

Michal Hurych

Year:

2014







Support grid: sandwich masonry, external monolithic concrete slab is connected to load bearing construction with heavy duty steel anchors, which can be levelled

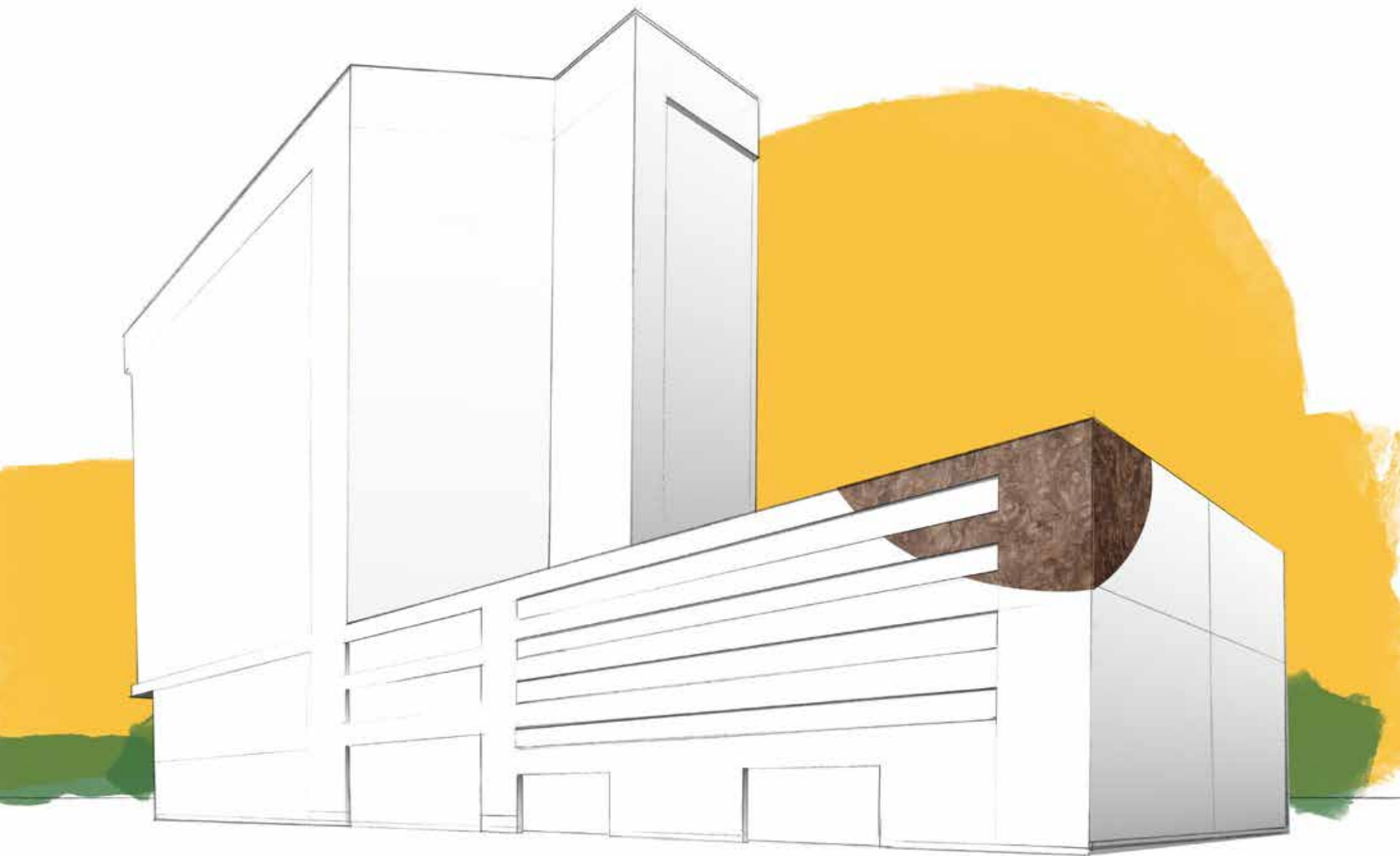
Mineral insulation: Knauf Insulation

External finish: concrete in red colour





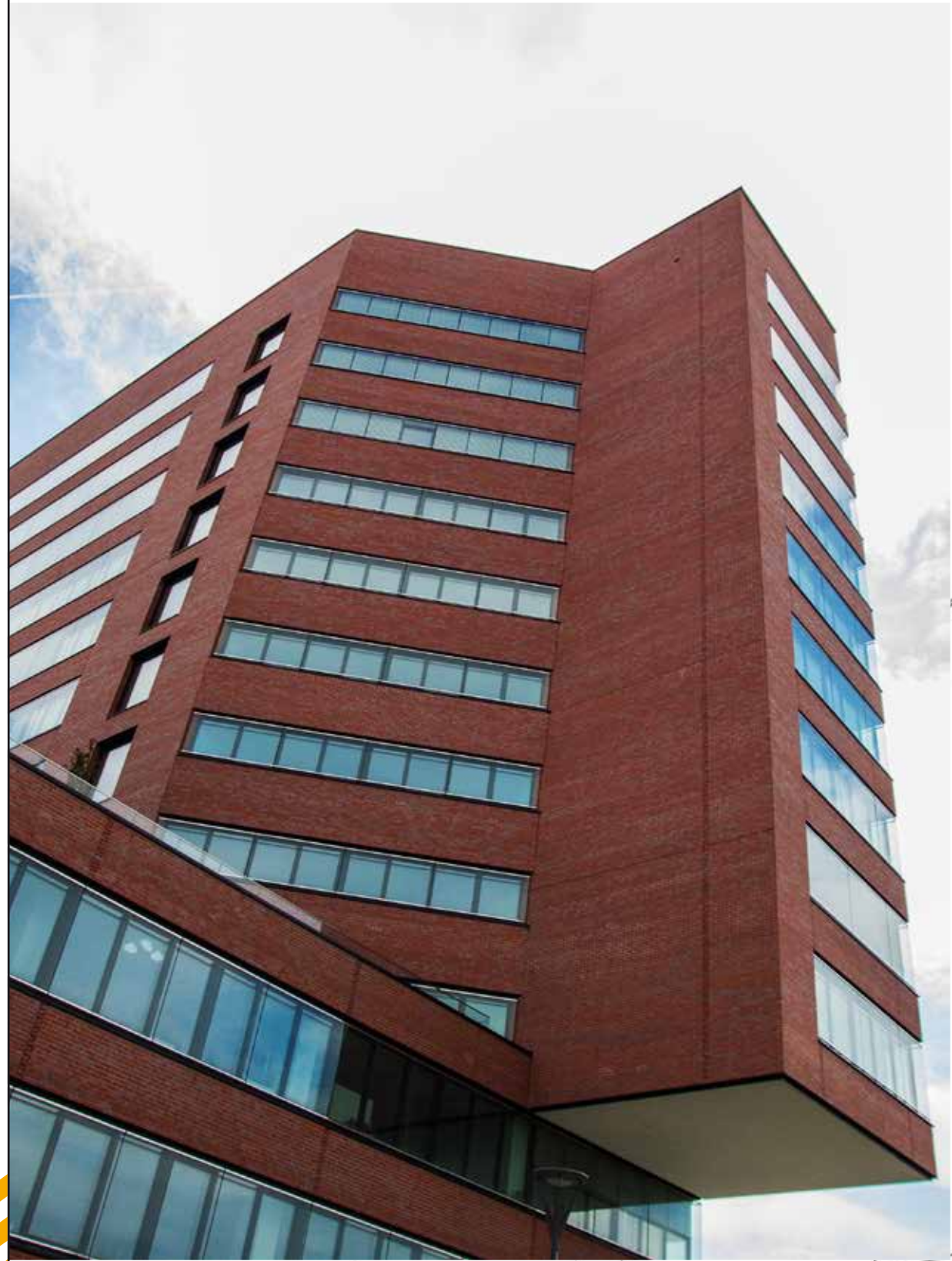
## Multifunctional complex DORN



Place:	Brno
Architect:	Tomáš Rusín, Ivan Wahla
Studio:	RAW
Photographer:	Robert Rambousek
Year:	2016
Mineral insulation:	Knauf Insulation Mineral Plus EXT 034 V









## High school of electrotechnics



Place:

Plzeň

Photographer:

Robert Rambousek

Year:

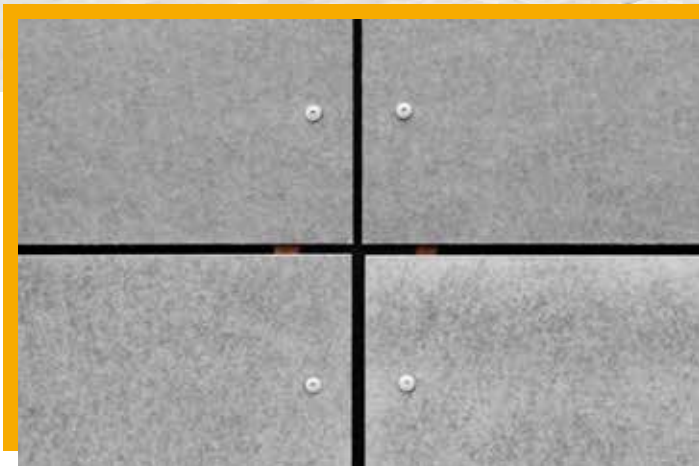
2017







Support grid: steel grid  
Mineral insulation: Knauf Insulation Mineral Plus EXT 035  
External finish: wooden planks and fibre cement boards





## Sports hall Klimeška



Place:	Kutná Hora
Architect:	Jitka Paroubková, Irena Pátková
Studio:	K1arch
Photographer:	Robert Rambousek
Year:	2017



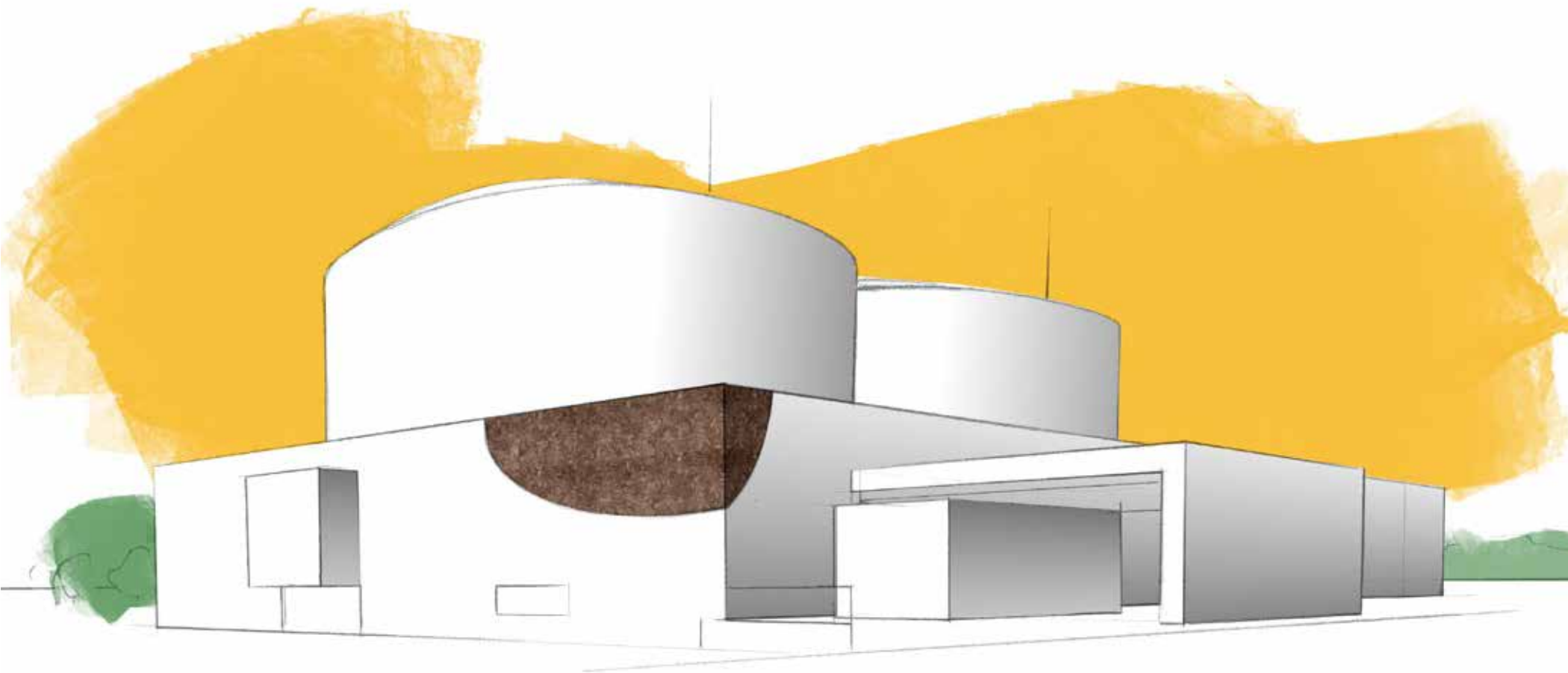


Support grid: steel grid  
Mineral insulation: Knauf Insulation Mineral Plus EXT 035  
External finish: metal cladding

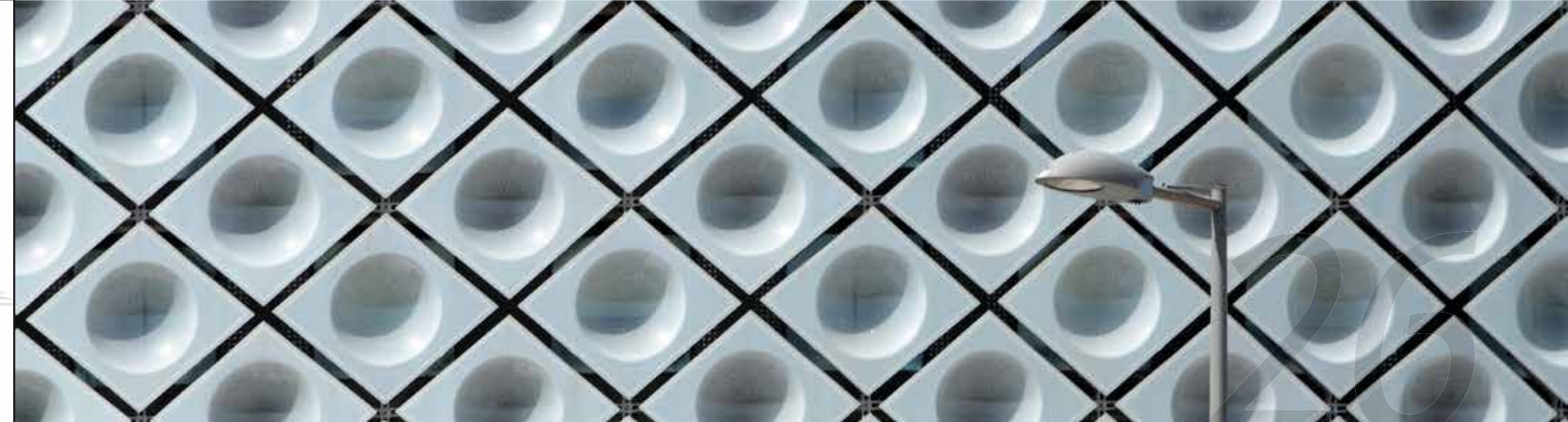
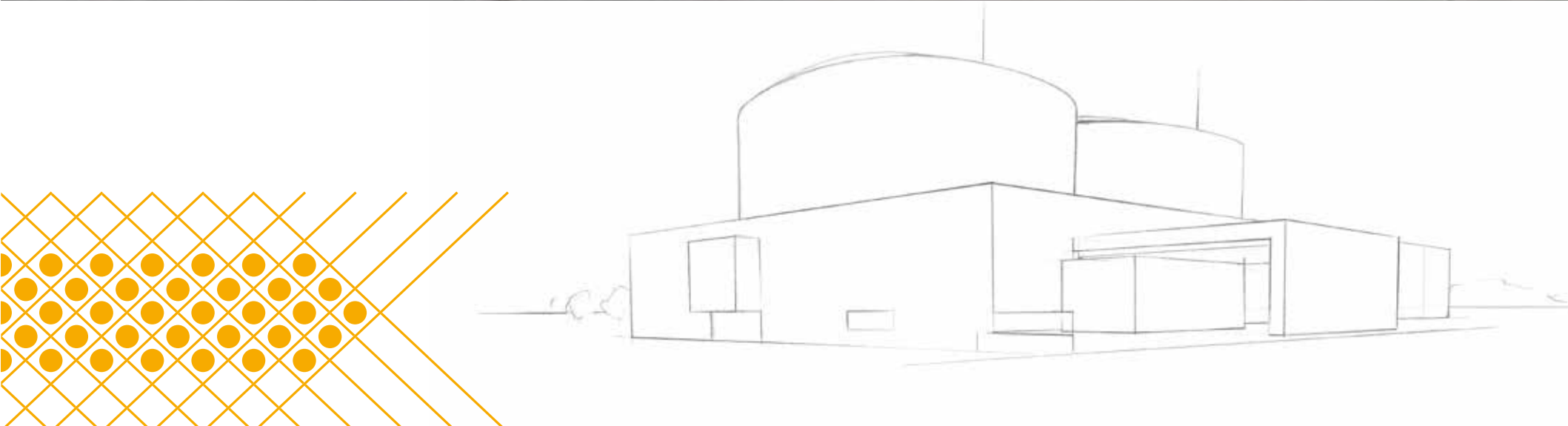


## King Juan Carlos Faculty Hospital

Place: Madrid - Móstoles  
Architect: Luis Muñoz, Daniel Roris  
Studio: Rafael de La-Hoz  
Photographer: Sergio Prieto  
Year: 2012  
Mineral insulation: Knauf Insulation





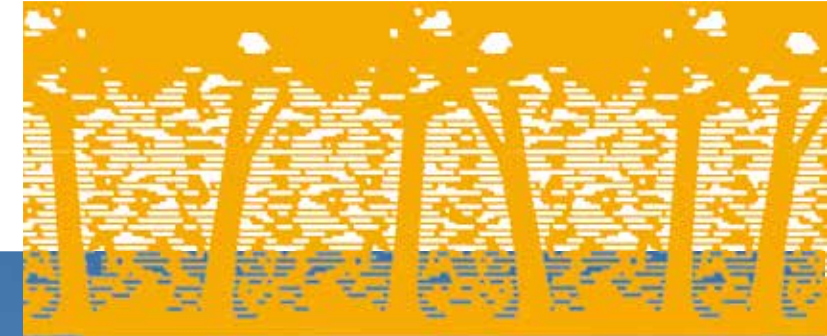




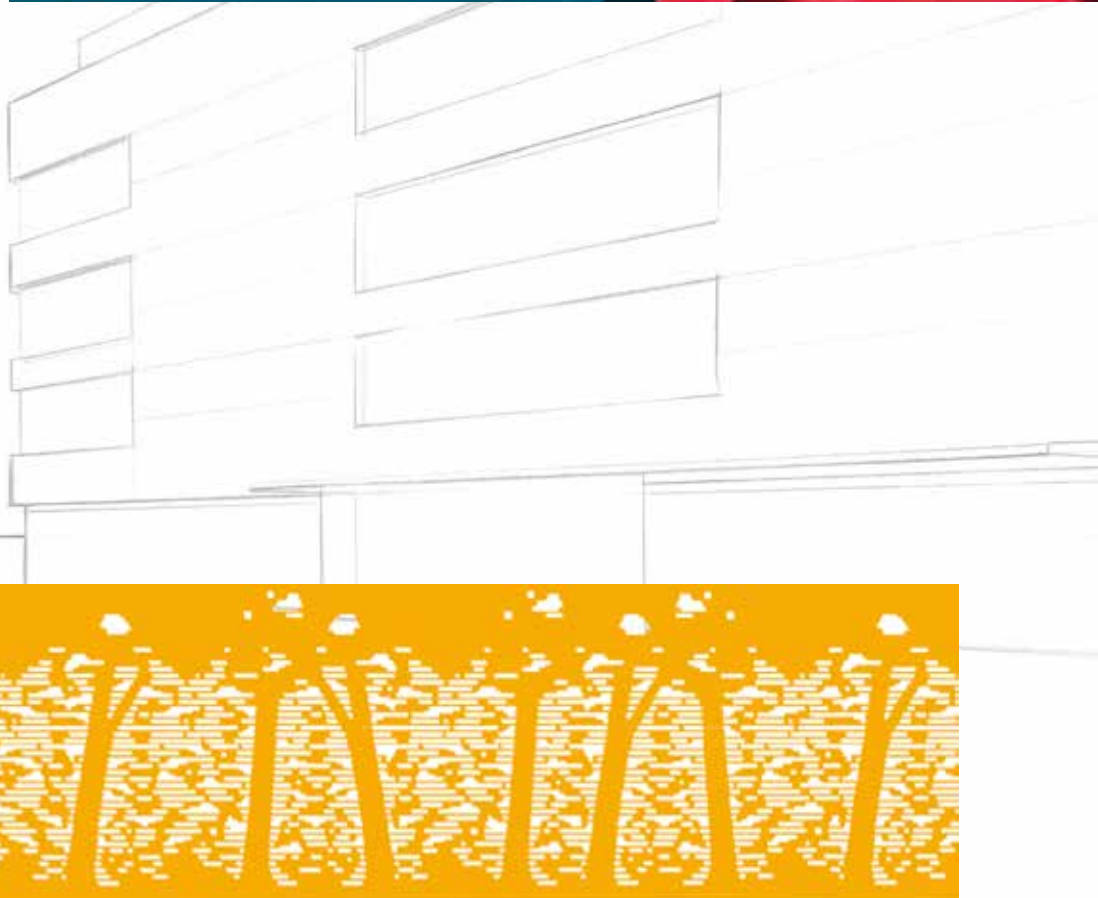
## Children's Hospital Sant Joan de Déu



Place:	Barcelona
Architect:	Rosa Clotet
Studio:	Llongueras Clotet Architects
Photographer:	Jordi Surroca
Year:	2015
Mineral insulation:	Knauf Insulation









## Multifunctional complex EDIFICIO ALBIA

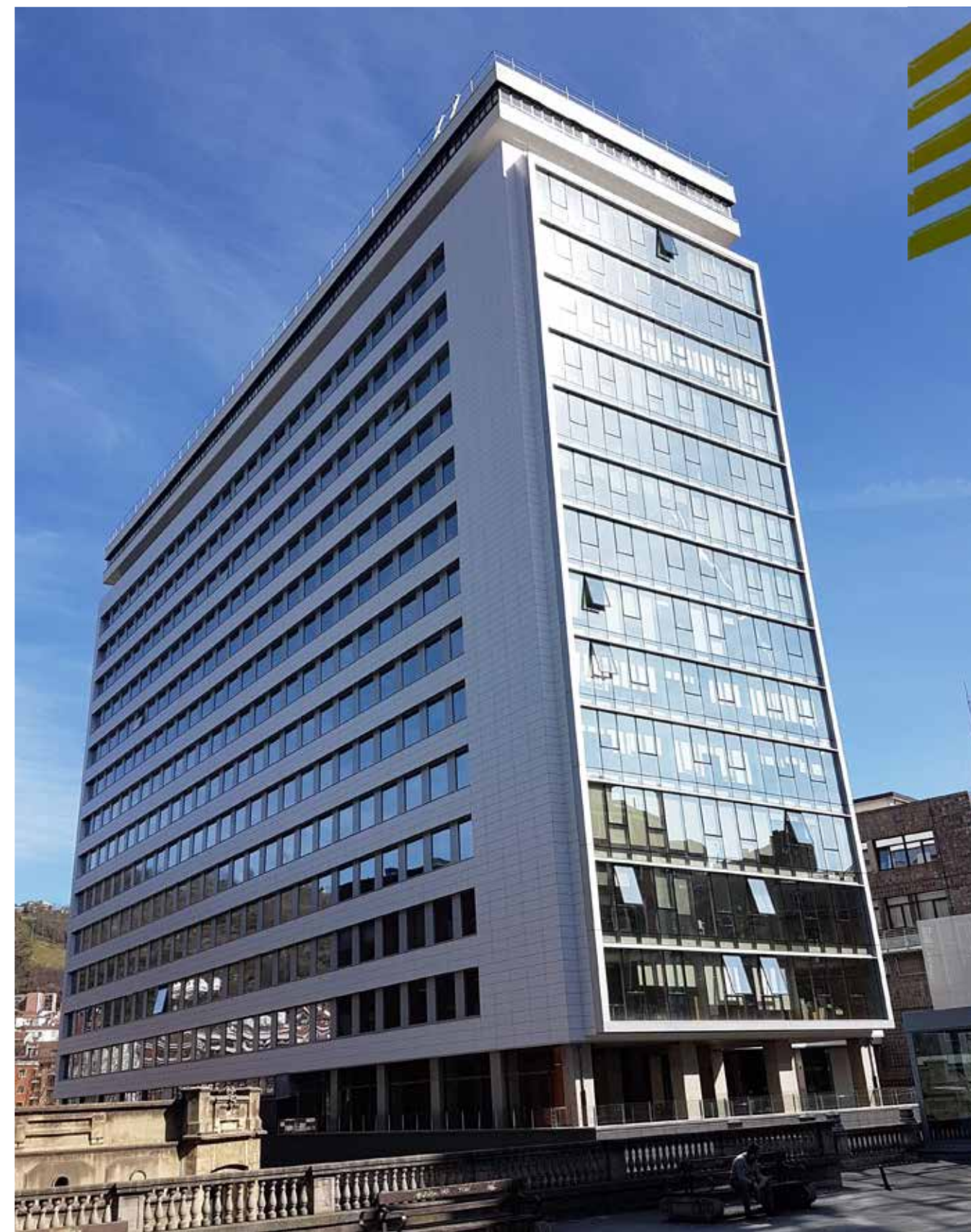


Place:

Bilbao

Mineral insulation:

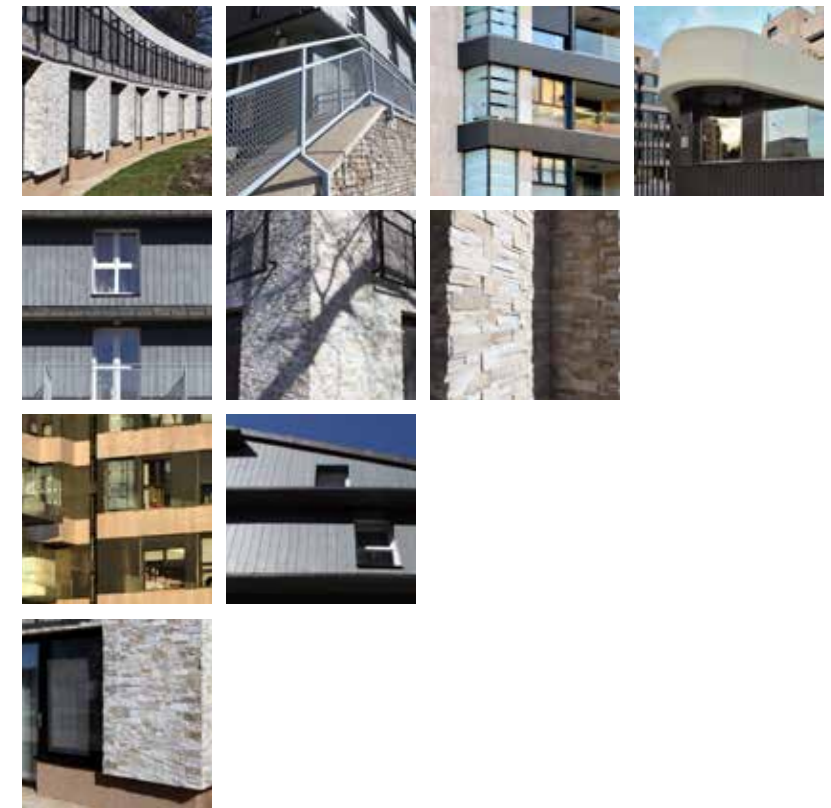
Knauf Insulation





ACCOMMODATION

ACCOMMODATION







Extension of hotel Bouda Máma

Place:	Pec pod Sněžkou
Architect:	Martin Feistner, Jiří Hůrka
Studio:	Dům a Město, společnost architektů
Photographer:	Robert Rambousek
Year:	2011







Support grid:  
Mineral insulation:  
External finish:

wooden grid  
Knauf Insulation  
wooden planks





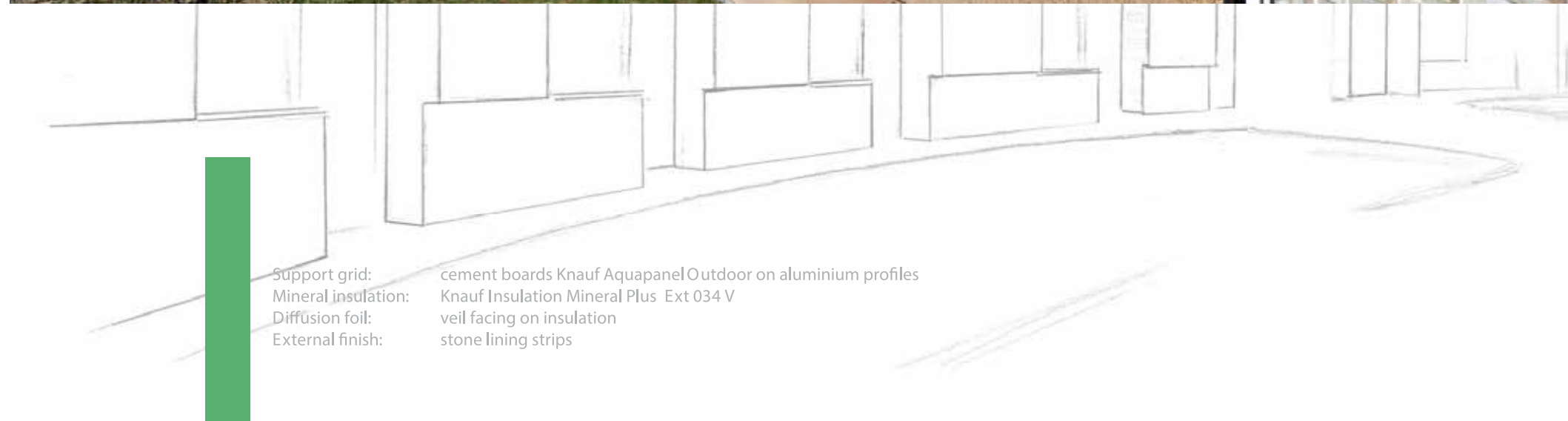
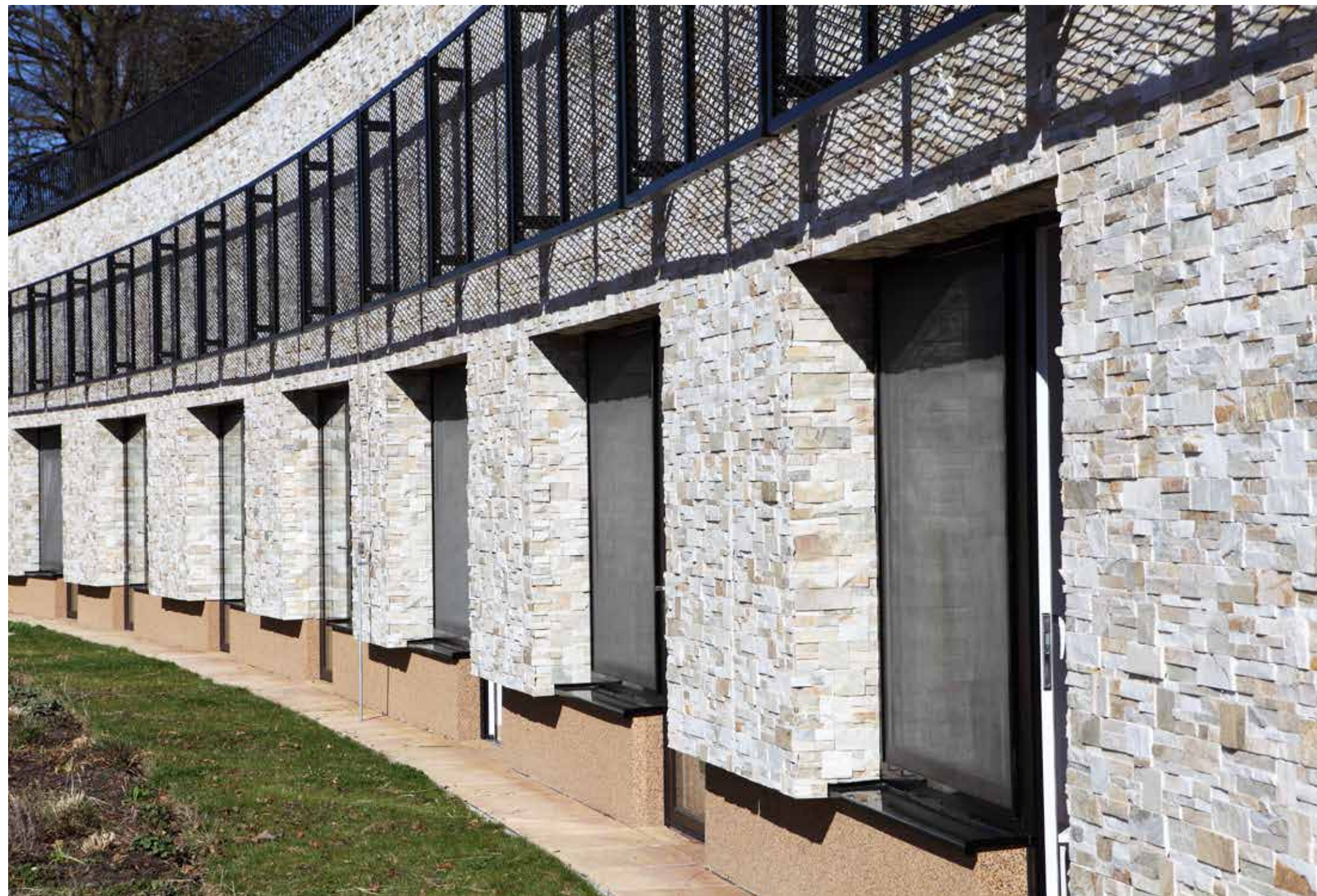


## Extension of retirement home

Place: Proseč u Pošné  
 Studio: Senior Holding, s. r. o.  
 Photographer: Robert Rambousek  
 Year: 2015

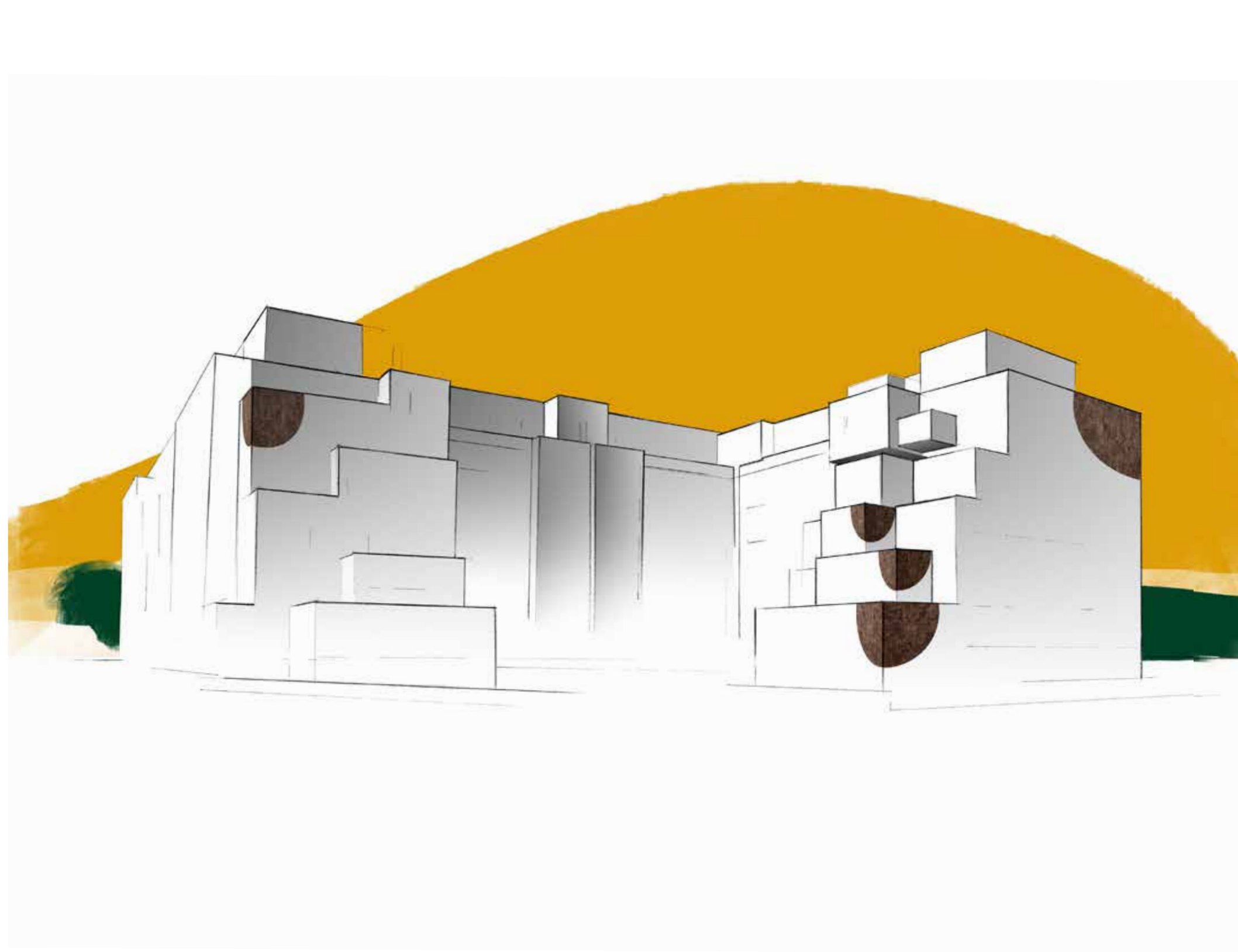






Support grid: cement boards Knauf Aquapanel Outdoor on aluminium profiles  
 Mineral insulation: Knauf Insulation Mineral Plus Ext 034 V  
 Diffusion foil: veil facing on insulation  
 External finish: stone lining strips



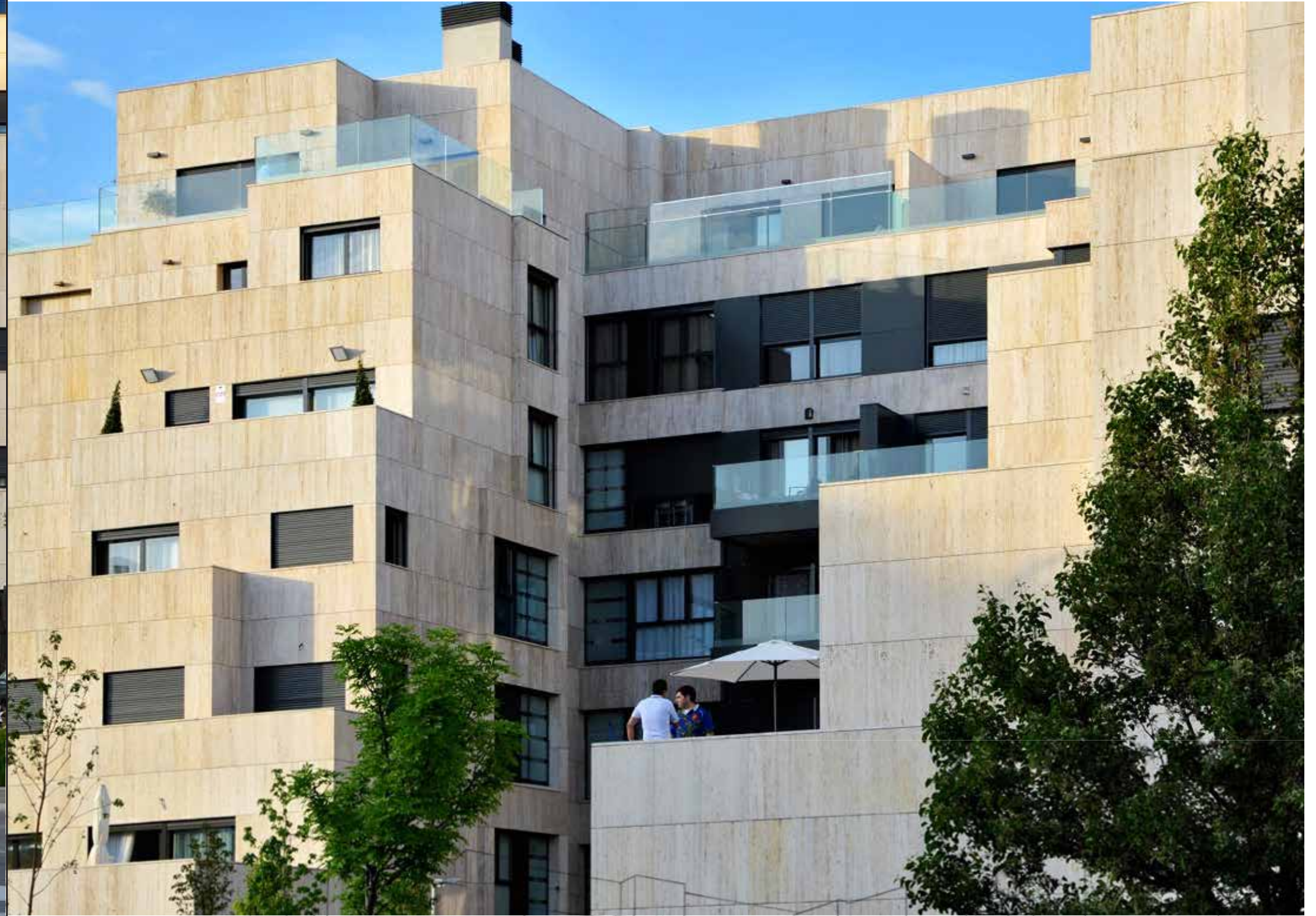
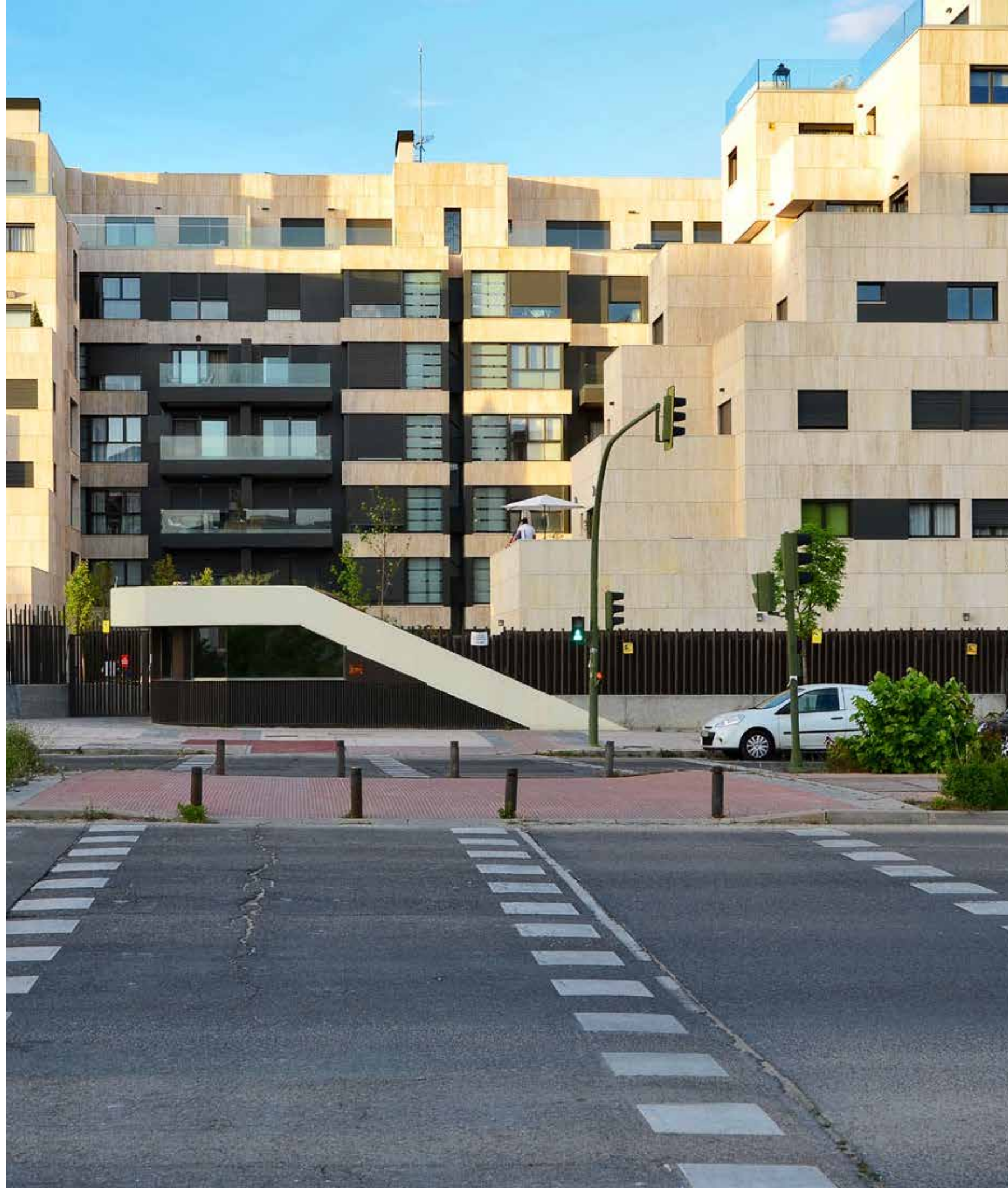


Multi-family building Sanchinarro



Place:	Madrid - Sanchinarro
Photographer:	Sergio Prieto
Year:	2016
Mineral insulation:	Knauf Insulation







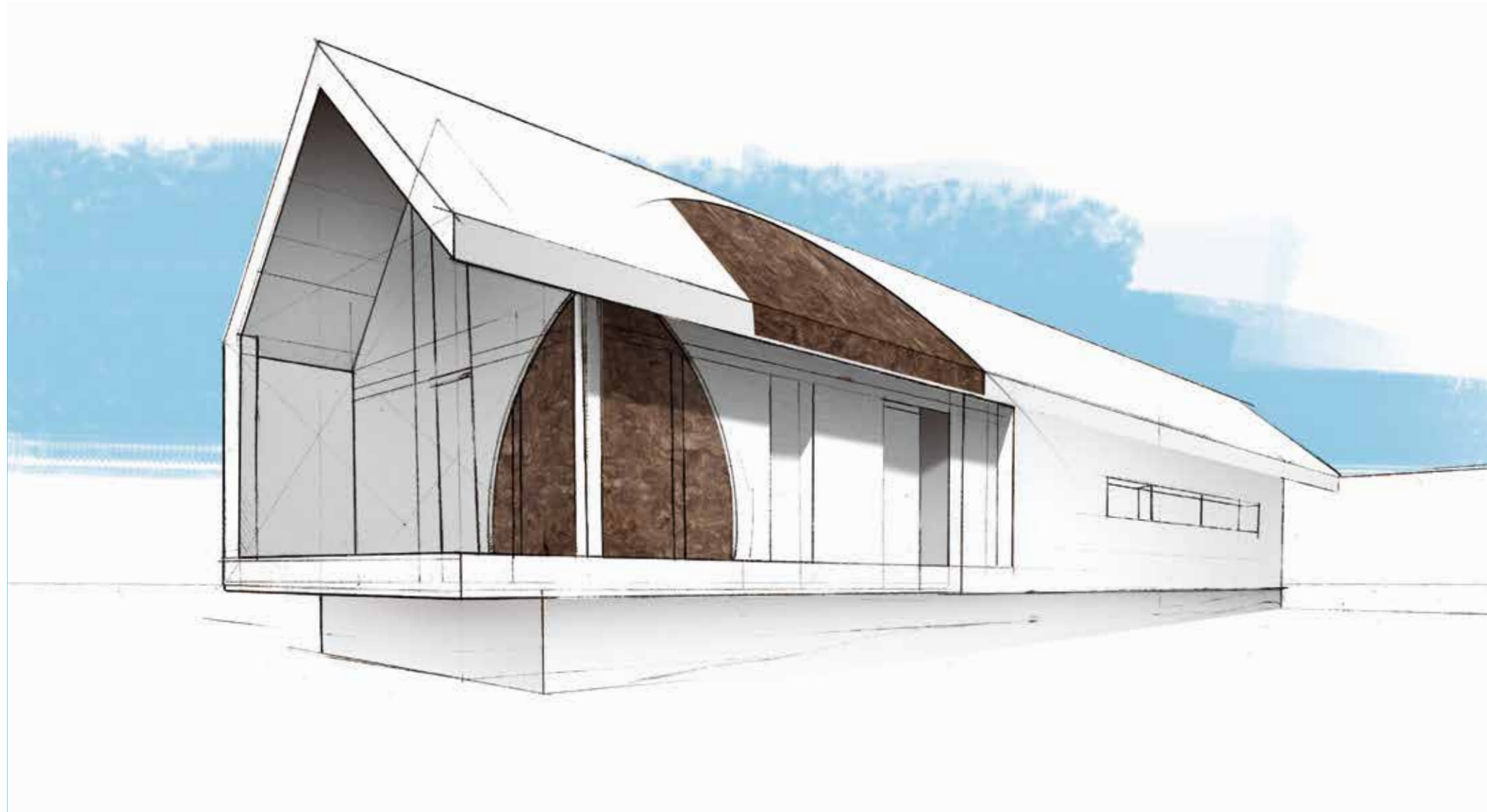
FAMILY HOUSES

FAMILY HOUSES





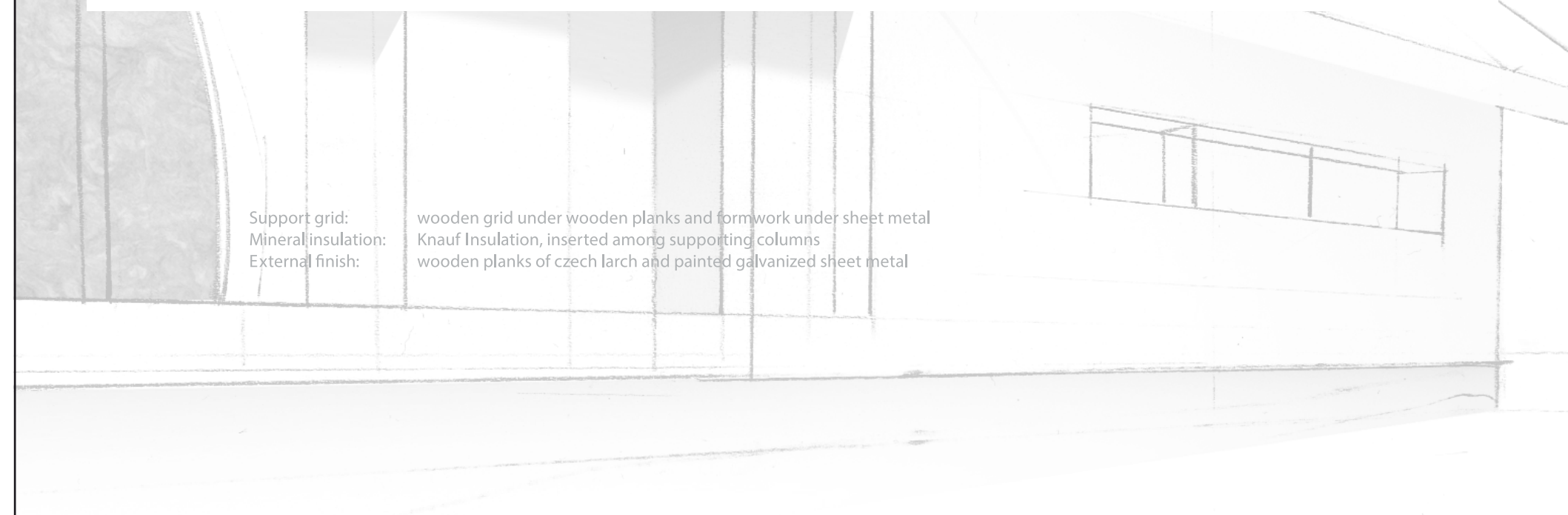
Passive family house Dobříš



Place: Dobříš  
Architect: Ondřej Kaluš  
Studio: RH - ARCH  
Photographer: Petr Filip  
Year: 2016



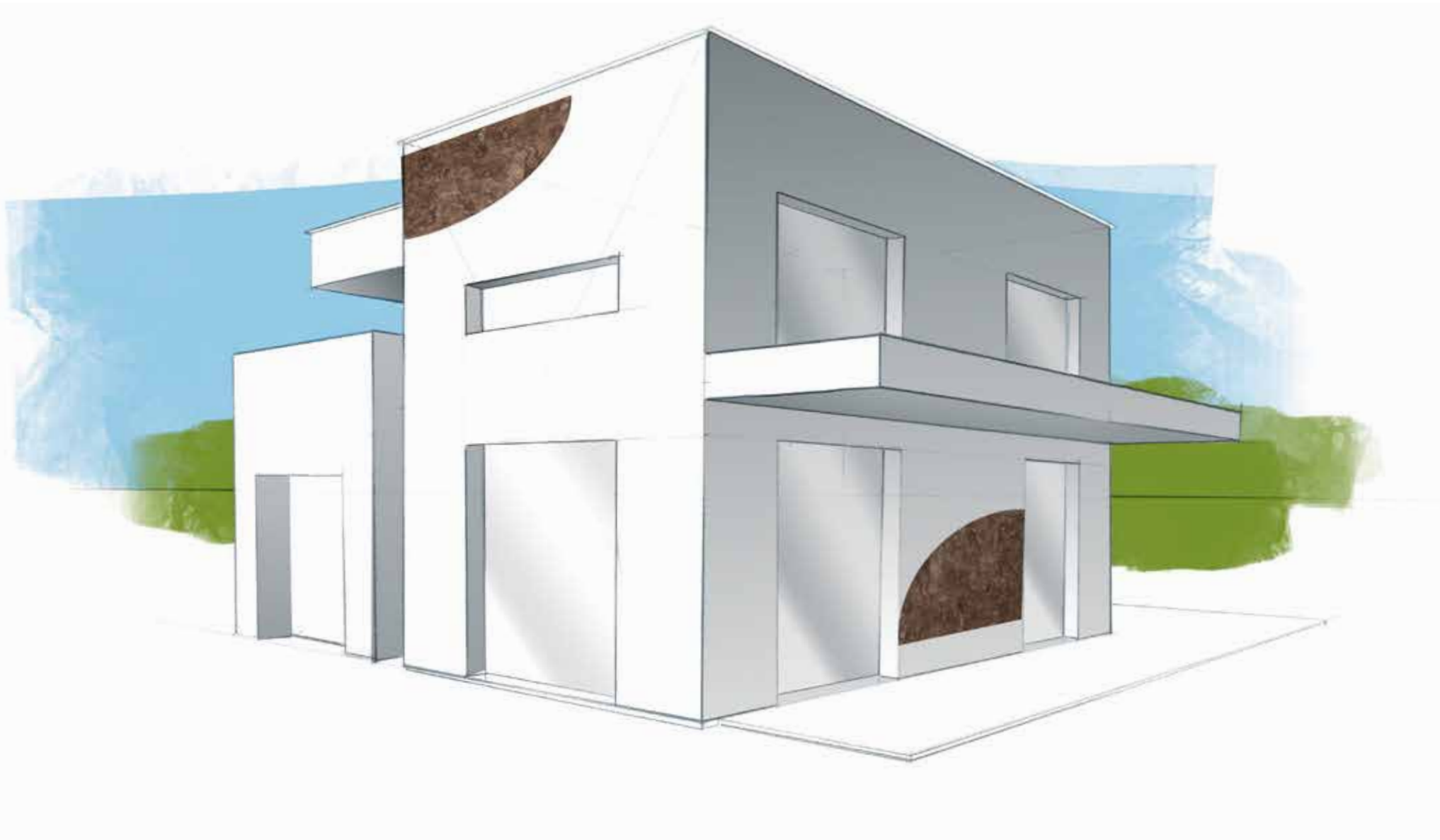




Support grid: wooden grid under wooden planks and formwork under sheet metal  
Mineral insulation: Knauf Insulation, inserted among supporting columns  
External finish: wooden planks of czech larch and painted galvanized sheet metal



Low energy family house Křeslice



Place: Křeslice  
Architect: Josef Pfeifer  
Studio: ATELIE RPFEIFER  
Photographer: Robert Rambousek  
Year: 2009

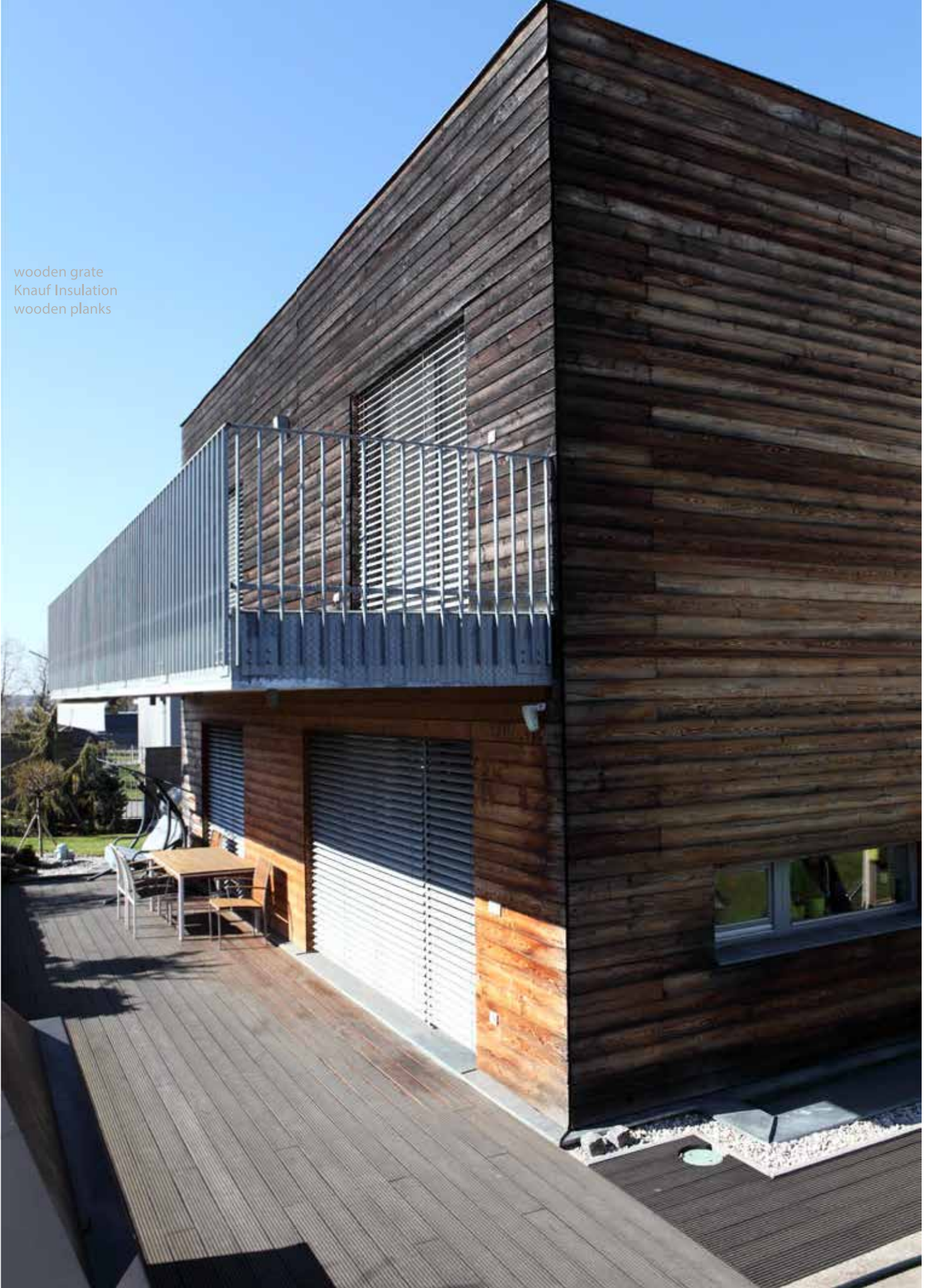






Support grid:  
Mineral insulation:  
External finish:

wooden grate  
Knauf Insulation  
wooden planks





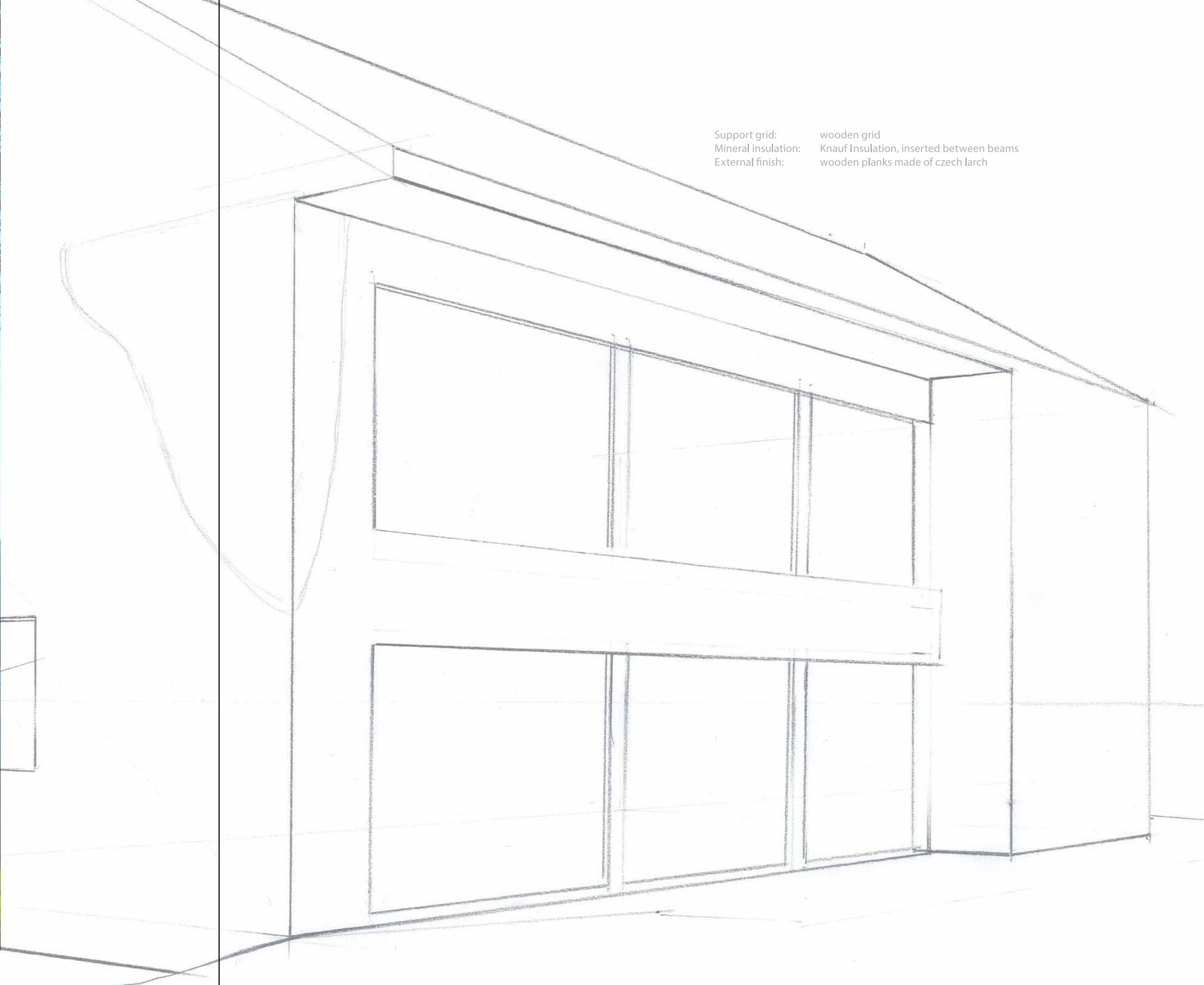
## Passive family house Řevnice



Place:	Řevnice
Architect:	Thomas Zagdoun
Construction company:	Chytrý dům s.r.o.
Photographer:	Petr Filip
Year:	2016







Support grid: wooden grid  
Mineral insulation: Knauf Insulation, inserted between beams  
External finish: wooden planks made of czech larch



## Passive family house Krakov



Place:	Krakov
Architect:	Simona Vališová
Studio:	atelier nyna
Construction company:	Chytrý dům s.r.o.
Photographer:	Petr Filip
Year:	2016





Support grid: wooden grid and wood fiber board  
Mineral insulation: Knauf Insulation, inserted between beams  
External finish: wooden planks made of siberian larch





## Passive family house Olešná



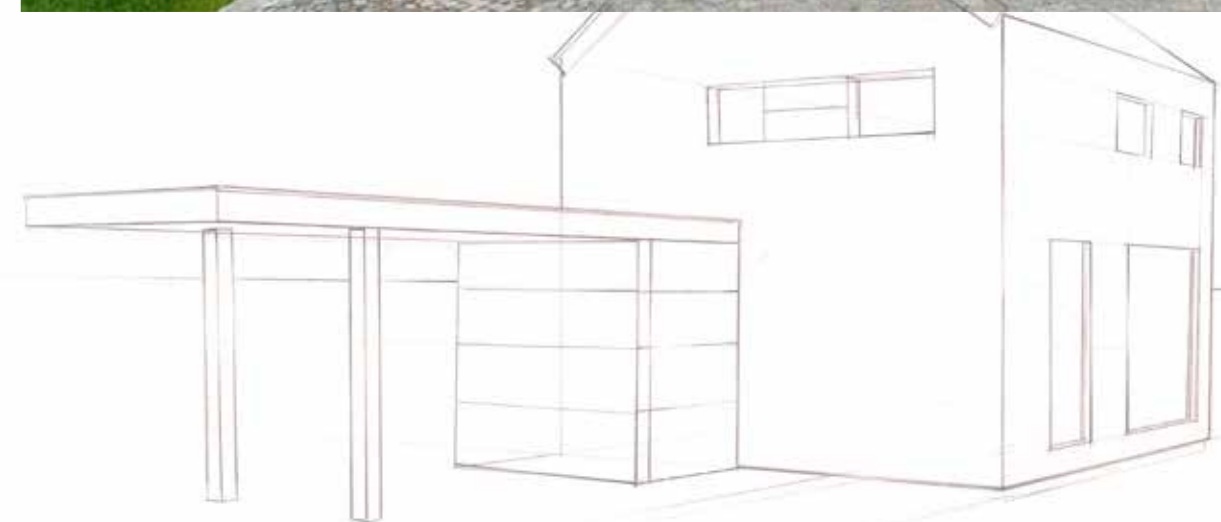
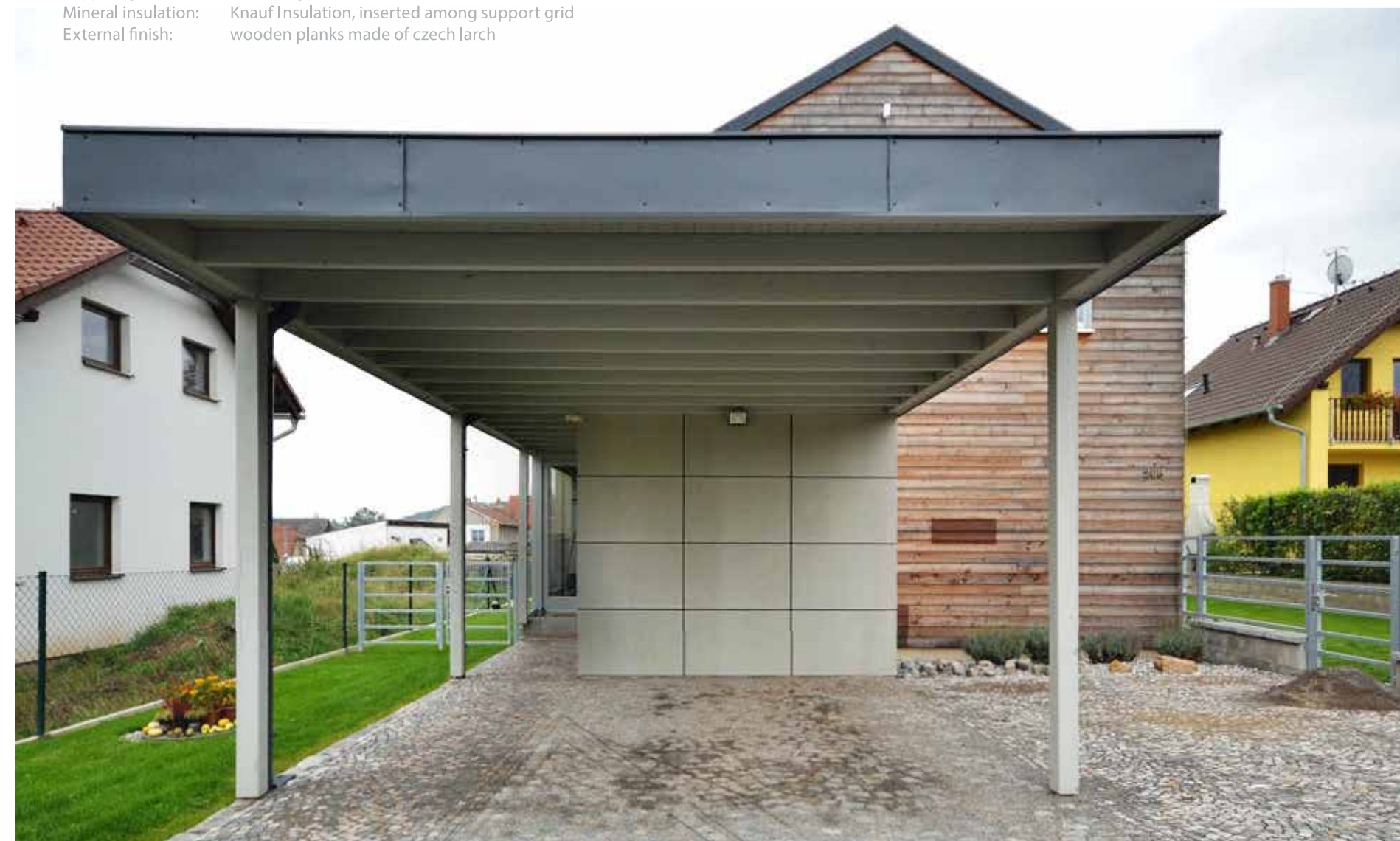
Place:	Olešná
Architect:	Ondřej Kaluš
Studio:	RH – ARCH
Construction company:	Chytrý dům s.r.o.
Photographer:	Petr Filip
Year:	2016





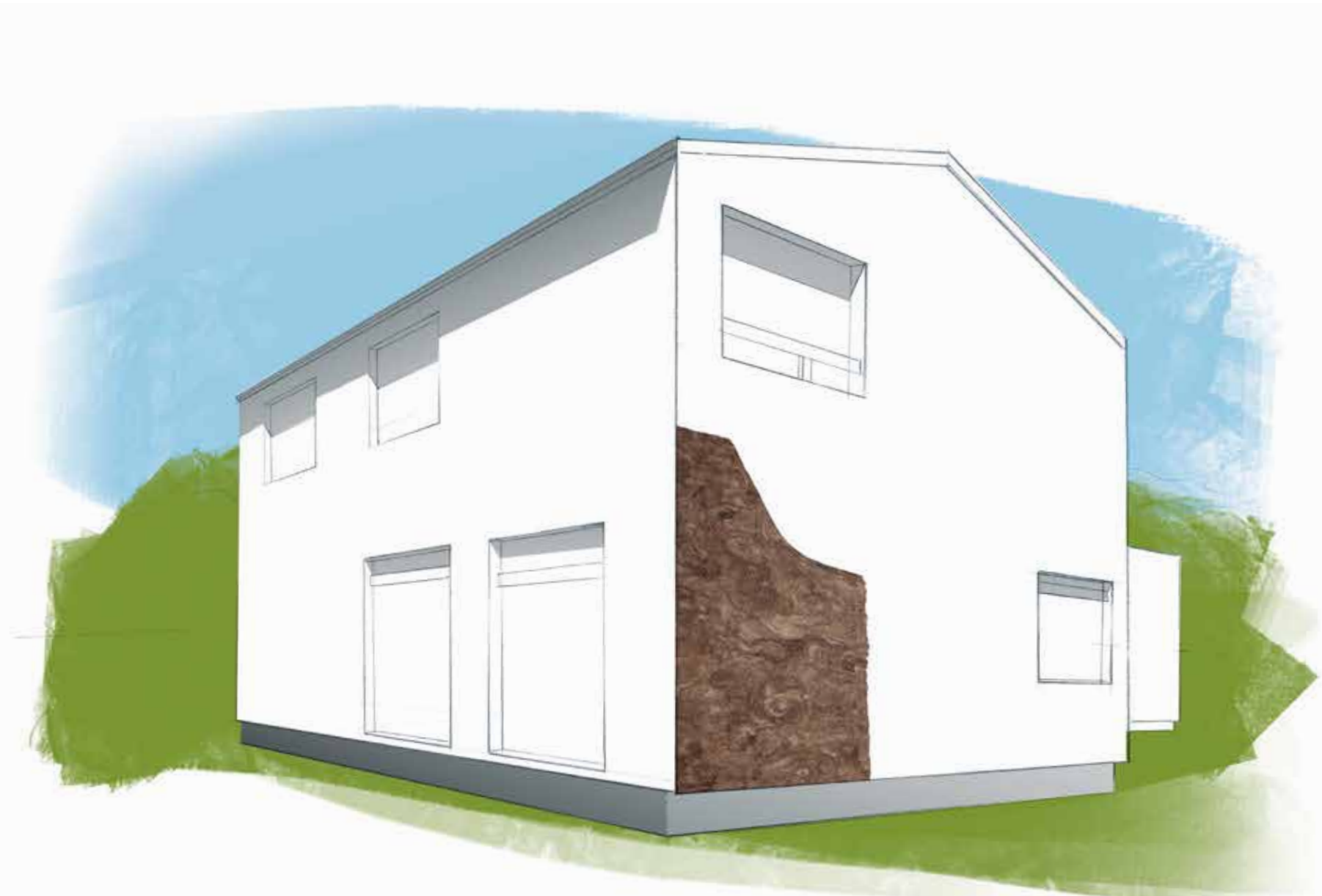


Support grid: wooden grid and wood fiber board  
Mineral insulation: Knauf Insulation, inserted among support grid  
External finish: wooden planks made of czech larch





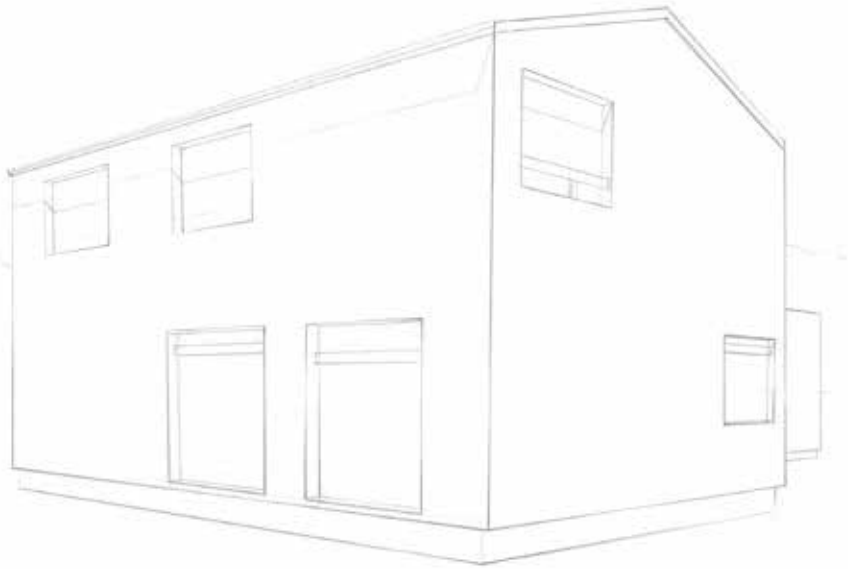
Passive family house Počaply



Place:	Počaply
Architect:	Aleš Papp, Milan Vít, Magdaléna Pappová
Studio:	Cuboid Architekti
Construction company:	LU CERN - moderní dřevostavby
Photographer:	Robert Rambousek
Year:	2017







Support grid:	wooden grid
Mineral insulation:	Knauf Insulation, inserted among support grid
External finish:	wooden planks



## Passive family house Libušín



Place:	Libušín
Architect:	Jaroslava Merhautová
Studio:	LUCERN - moderní dřevostavby
Construction company:	LUCERN - moderní dřevostavby
Photographer:	Martin Cozl
Year:	2017







Support grid: wooden grid  
Mineral insulation: Knauf Insulation, inserted among support grid  
External finish: wooden planks





## Passive family house Hodkovičky

Place: Praha - Hodkovičky  
Architect: Petr Vaněk  
Photographer: Robert Rambousek  
Year: 2017







Support grid: ventilated facade with the systemDiagonal 2H  
Mineral insulation: Knauf Insulation Mineral Plus  
External finish: Heraklith cladding





Passive family house Busíny  
application of support grid in Diagonal 2H system  
by construction company Radek Skořepa





1)

Measurement and marking of horizontal and vertical dot pitches, where diagonal elements will be applied.



2)

Application of upward and downward diagonal elements which can be levelled.



3)

Installation of L-profiles



Application of Mineral Plus insulation



4)

This is followed by bonding the wind barrier to double-sided adhesive tapes, installation of Z-profiles and design boards.



5)

For a detailed installation process, see the Knauf Insulation ventilated facade brochure.