



HEALTH

LUXURY

GREEN



# Alashrafy Group

The Group operates a diverse scope of complementary associated businesses that empower us to offer customers a one-stop arrangement for all their construction, development and asset administration needs. Our aptitude to create innovative, practical solutions for our clients is our strength. Alashrafy has proven competency in providing high-quality projects on time and within client anticipations and budget. Together with our customers, we deliver landmark projects that foster sustainable progress and grow economies.

## Vision

To be leaders in the development of integrated solutions for construction, decoration, mechanical and electrical works for green buildings.

## Mission

Our mission is to renovate the way buildings and communes are constructed and operated, which would pave the way to a healthier and sustainable environment that enhances our clients' quality of life.

# ABOUT OUR SYSTEM

Our AC system makes a significant contribution to the reduction of operating costs whilst reducing the burden on the environment at the same time. Traditional systems such as ventilation air conditioning systems or static heating systems quickly reach their limits in regard to optimal comfort with minimal space and energy requirement.

Capillary tube technology takes a completely new approach and follows nature's example. Water-carrying capillary tube mats made out of PEX are installed directly below the surface of the room enclosure surfaces, allowing smooth temperature control of ceilings, walls and flooring. The transfer of energy between users and the activated surfaces is achieved predominantly using radiation – matching the natural conditions for regulation of the heat balance of all living organisms. This is why people in rooms cooled or heated with the capillary tube systems feel demonstrably more comfortable, increasing productivity.



*Chilled ceiling*

## Working Principle

The warm air becomes cold through heat exchange and falls silently down to the floor while drawing warmer air towards the ceiling, creating a steady cycle of natural air circulation.

# Benefits

## ENERGY EFFICIENT

- Up to 45% lower energy consumption compared with traditional system.

## HEALTHY SOLUTION

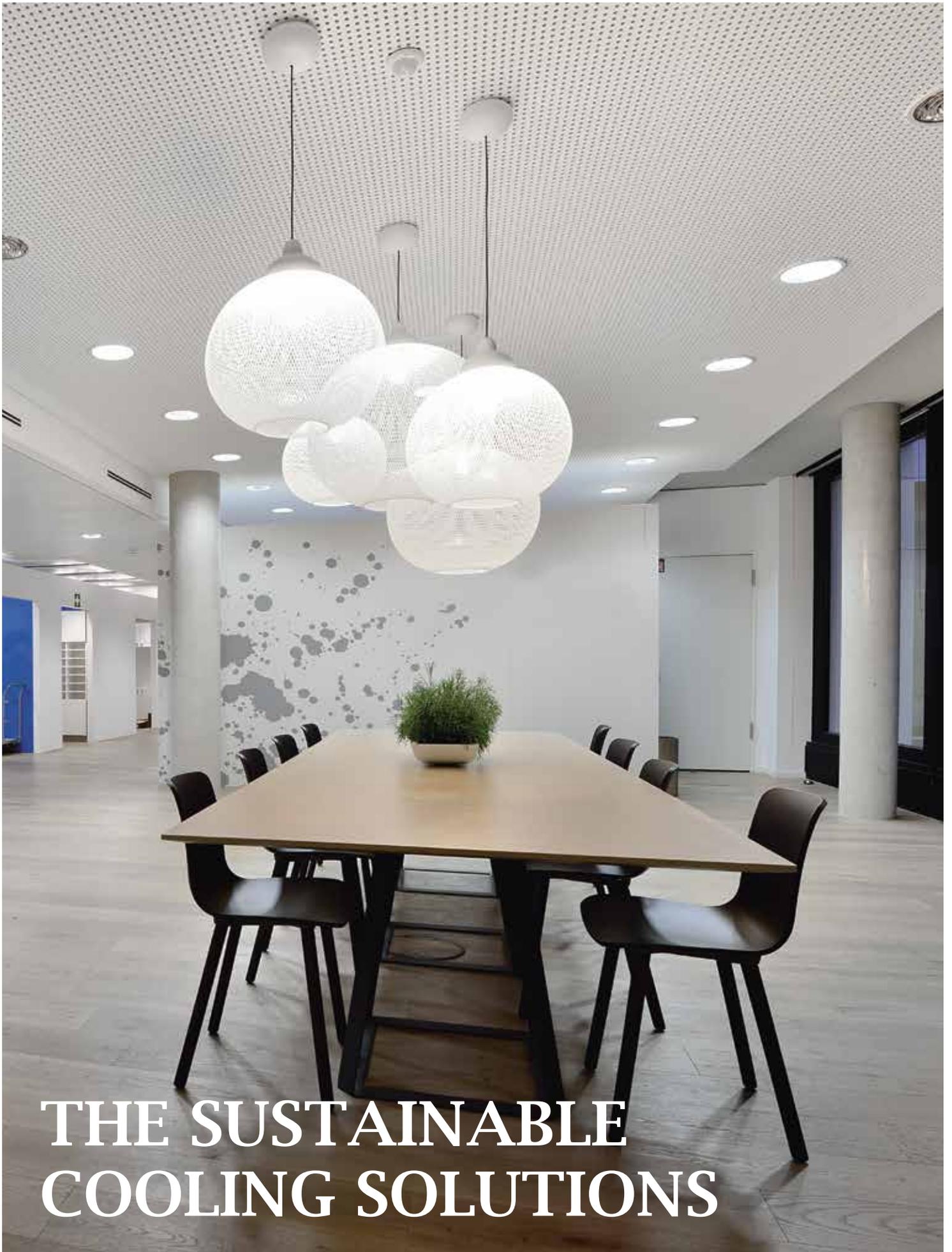
- improved indoor air quality since there is no drought ,no swelling of bacteria and dust , So no negative effects on health.

## SILENT COOLING

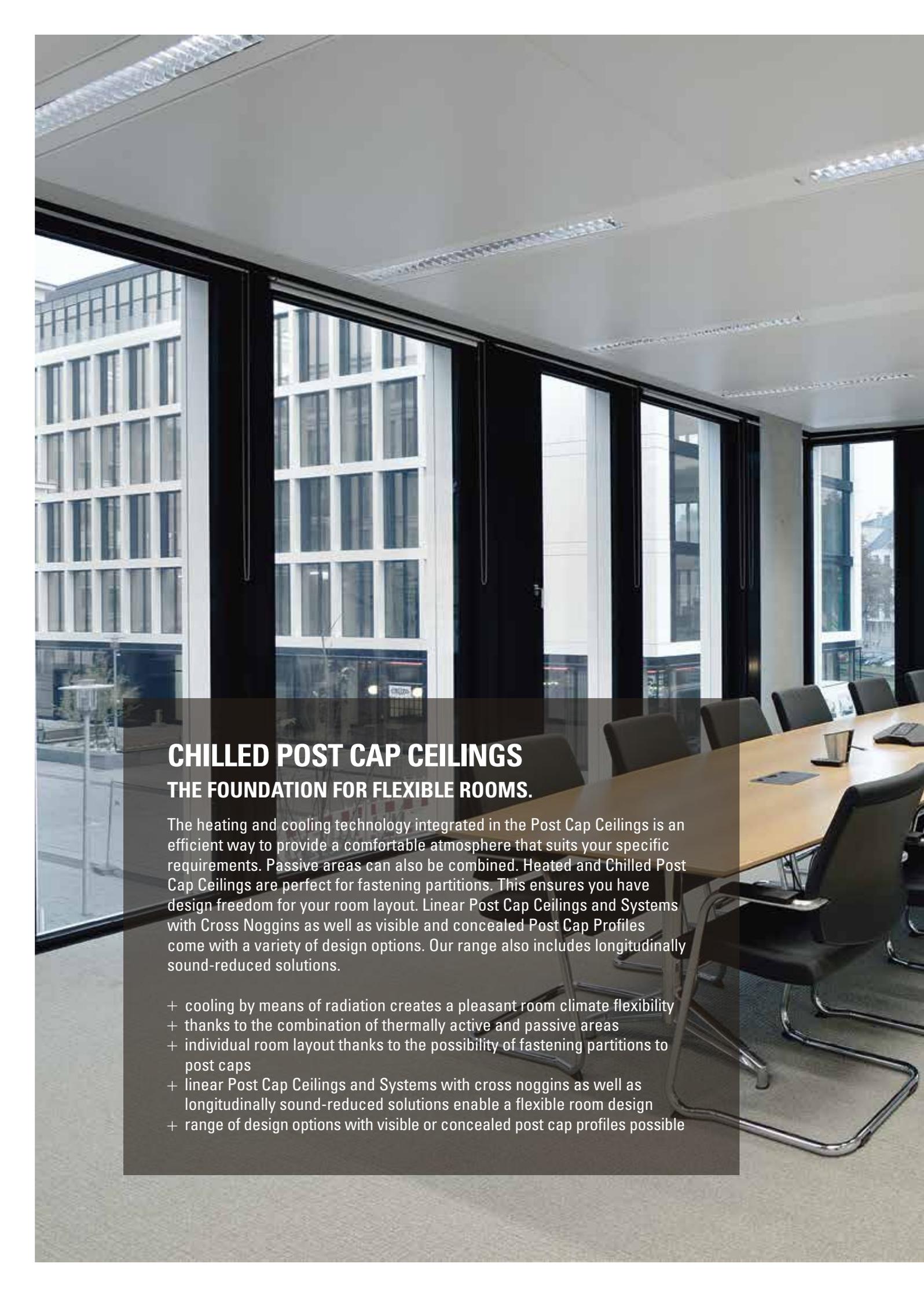
- Because they have no moving parts, radiation cooling systems are quieter than VAV systems.

## comfort

- You have the potential for better thermal comfort because these systems have a better air-distribution pattern.



# THE SUSTAINABLE COOLING SOLUTIONS

A modern conference room with large windows and a long wooden table. The room features a white ceiling with recessed lighting and a grey carpet. The windows offer a view of a city building.

## CHILLED POST CAP CEILINGS THE FOUNDATION FOR FLEXIBLE ROOMS.

The heating and cooling technology integrated in the Post Cap Ceilings is an efficient way to provide a comfortable atmosphere that suits your specific requirements. Passive areas can also be combined. Heated and Chilled Post Cap Ceilings are perfect for fastening partitions. This ensures you have design freedom for your room layout. Linear Post Cap Ceilings and Systems with Cross Noggins as well as visible and concealed Post Cap Profiles come with a variety of design options. Our range also includes longitudinally sound-reduced solutions.

- + cooling by means of radiation creates a pleasant room climate flexibility
- + thanks to the combination of thermally active and passive areas
- + individual room layout thanks to the possibility of fastening partitions to post caps
- + linear Post Cap Ceilings and Systems with cross noggins as well as longitudinally sound-reduced solutions enable a flexible room design
- + range of design options with visible or concealed post cap profiles possible





## CHILLED HOOK-ON CEILINGS VERSATILE SOLUTIONS.

Chilled Hook-On Ceilings combine efficient heating and cooling by means of radiation with versatile design options. The Ceiling Systems with concealed substructure impress with their visual and functional adaptability. Ceiling panels in different shapes and sizes offer design freedom – rectangular, square, trapezoidal, triangular as well as curved panels can be realised. Thermally active and passive areas can of course be combined.

- + cooling by means of radiation creates a pleasant room climate flexibility
- + thanks to the combination of thermally active and passive areas uniform ceiling surface due to concealed substructure
- + individual design thanks to flexible panel shapes and sizes





## **CHILLED CORRIDOR CEILINGS**

### **APPEARANCE COUNTS. FUNCTION TOO.**

Create a pleasant climate in your corridors by means of radiant heating and cooling. This can be achieved with Plafotherm® Heated and Chilled Corridor Ceilings that span freely from partition to partition. An adjustable wall connection enables easy compensation of tolerances on the wall. Flexible implementation is possible when combining thermally active and passive areas.

- + cooling by means of radiation creates a pleasant room climate flexibility
- + thanks to the combination of thermally active and passive areas freely
- + spanned constructions
- + tolerance compensation on the wall is possible due to an adjustable wall connection





## CHILLED CANOPY CEILINGS BEAUTIFUL SHAPES.

These open ceiling constructions are the ideal solution for high architectural requirements, combined with high heating and cooling capacities as well as excellent sound absorption. The free-floating Canopy Ceilings allow a view of the bare ceiling and offer versatile design and arrangement possibilities. You can combine thermally active and passive areas to suit your specific needs.

- + cooling by means of radiation and convection creates a pleasant room climate
- + flexibility thanks to the combination of thermally active and passive areas
- + high heating/cooling capacity and sound absorption due to the open construction
- + design freedom due to individual arrangement of canopies
- + freely floating Canopy Ceilings allow a view of the bare ceiling





## CHILLED BAFFLE CEILINGS THEIR OPENNESS IS REMARKABLE.

Baffle Ceilings create a pleasant indoor climate thanks to convection and radiation. Very high cooling capacities are possible due to the open construction. Depending on the requirements, thermally active and passive baffles can be combined. The various baffle systems can be arranged and designed flexibly: Variable centre distances and baffle sizes enable flexible design.

- + cooling by means of convection and radiation creates a pleasant room climate
- + flexibility thanks to the combination of thermally active and passive baffles
- + high cooling capacity due to the open construction
- + freely selectable centre distances and baffle dimensions





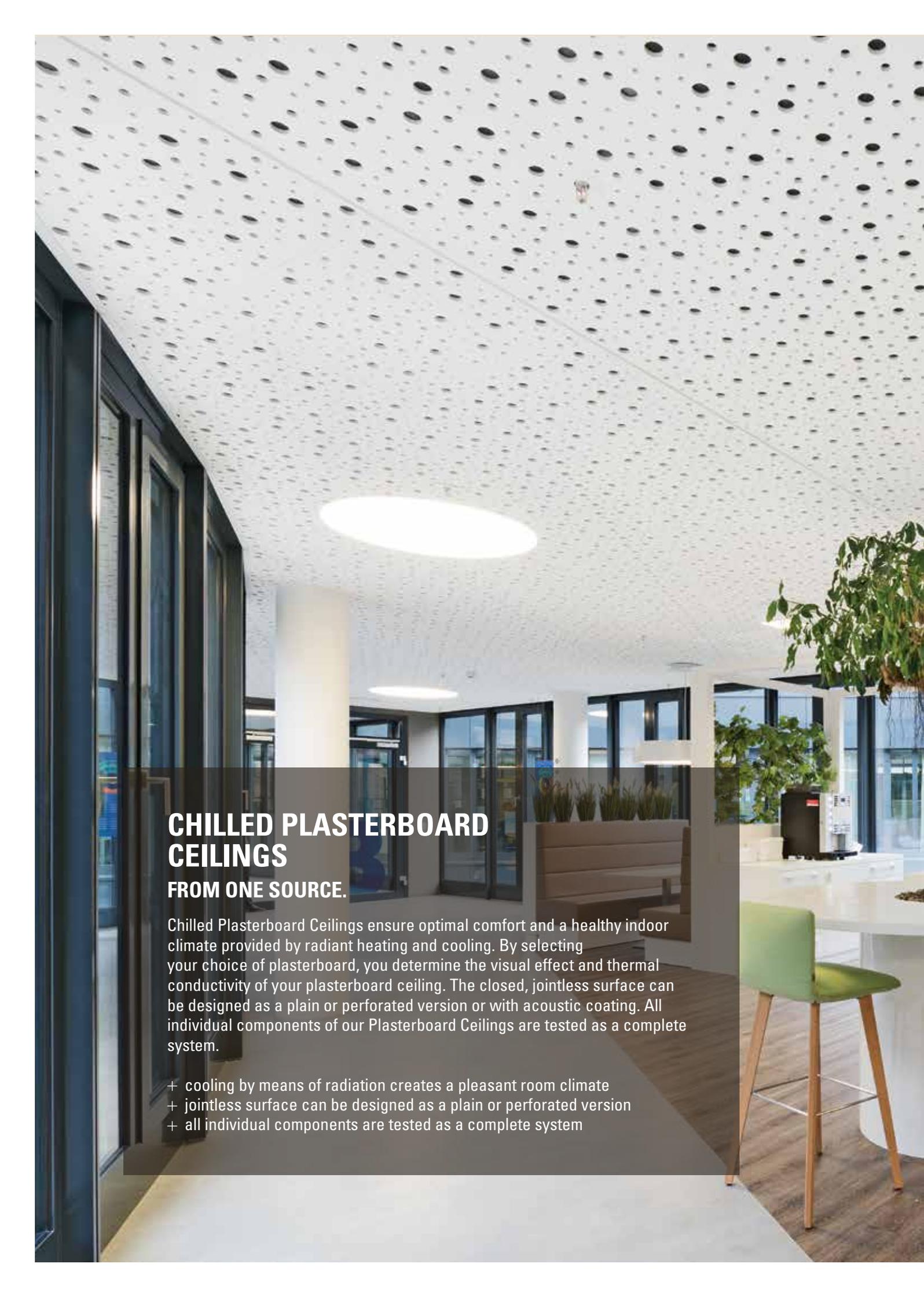
## **CHILLED EXPANDED METAL CEILINGS**

**AN IMPRESSIVE LOOK FOR ANY SPACE.**

Expanded Metal Ceilings use radiation to heat and cool your rooms comfortably – which allows you to create an ideal indoor climate. Thermally active and passive areas can be combined depending on your needs. Expanded Metal Ceilings are also extremely versatile in regard of their design: The structured expanded metal appearance creates a uniform ceiling surface with meshes in different shapes and sizes.

- + cooling by means of radiation creates a pleasant room climate flexibility
- + thanks to the combination of thermally active and passive areas uniform
- + ceiling surface due to concealed substructure
- + numerous design possibilities thanks to different mesh types, shapes and sizes



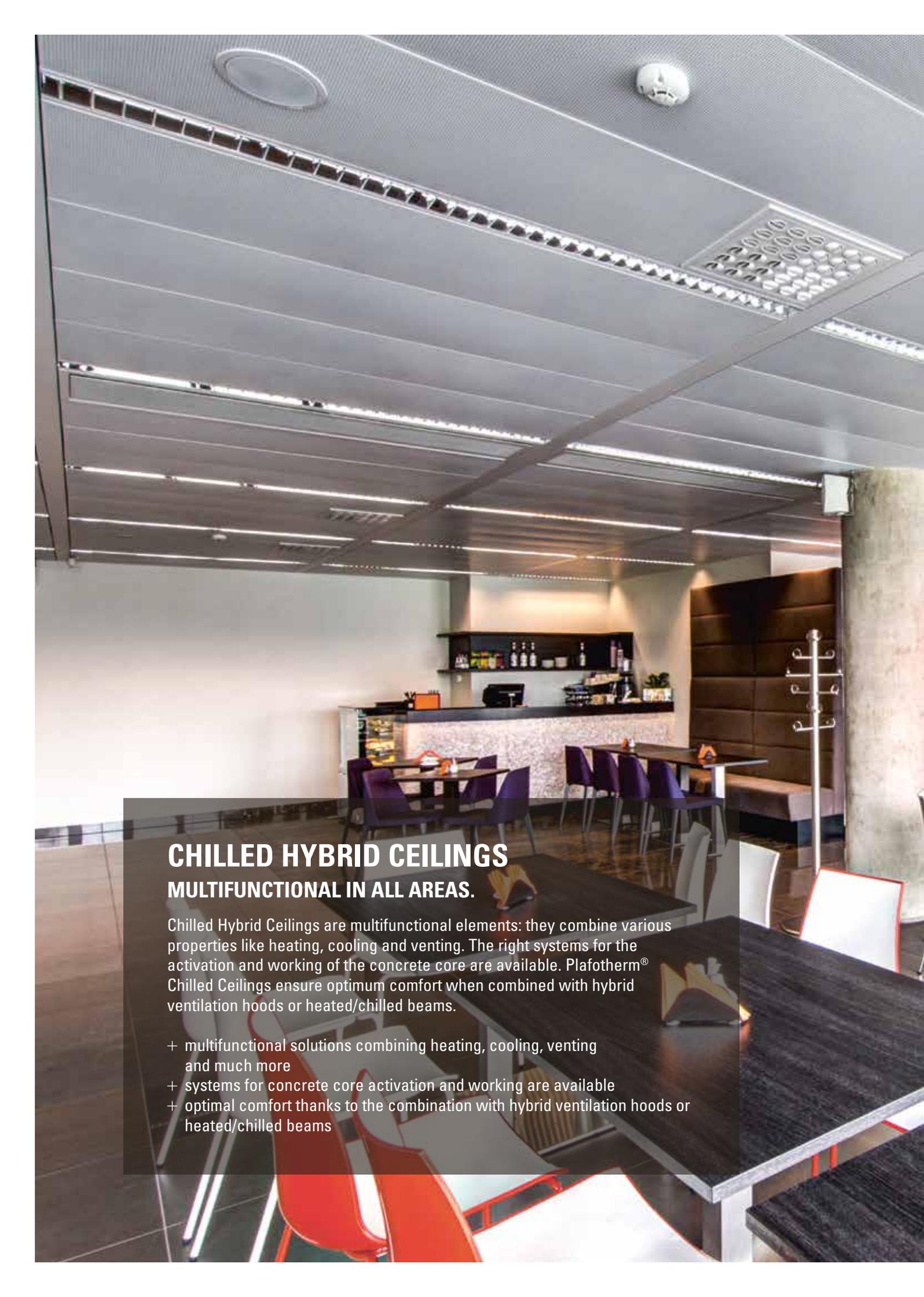


## CHILLED PLASTERBOARD CEILINGS FROM ONE SOURCE.

Chilled Plasterboard Ceilings ensure optimal comfort and a healthy indoor climate provided by radiant heating and cooling. By selecting your choice of plasterboard, you determine the visual effect and thermal conductivity of your plasterboard ceiling. The closed, jointless surface can be designed as a plain or perforated version or with acoustic coating. All individual components of our Plasterboard Ceilings are tested as a complete system.

- + cooling by means of radiation creates a pleasant room climate
- + jointless surface can be designed as a plain or perforated version
- + all individual components are tested as a complete system





## CHILLED HYBRID CEILINGS MULTIFUNCTIONAL IN ALL AREAS.

Chilled Hybrid Ceilings are multifunctional elements: they combine various properties like heating, cooling and venting. The right systems for the activation and working of the concrete core are available. Plafotherm® Chilled Ceilings ensure optimum comfort when combined with hybrid ventilation hoods or heated/chilled beams.

- + multifunctional solutions combining heating, cooling, venting and much more
- + systems for concrete core activation and working are available
- + optimal comfort thanks to the combination with hybrid ventilation hoods or heated/chilled beams





SOLUTIONS PARTNERS



**REHAU®**