

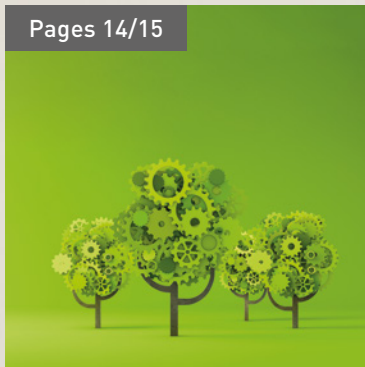
VarioTime

OUR VARIOTHERM MAGAZINE

*Sun child – bring the sun
into your home!*



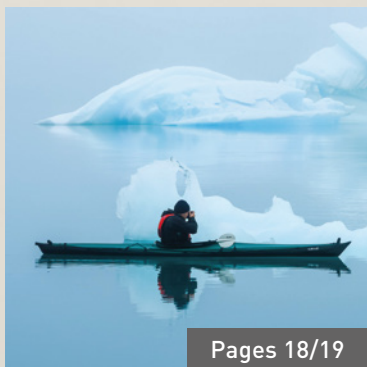
Pages 12/13



Pages 14/15



Pages 16/17



Pages 18/19



Pages 20-23



Pages 24-26



Pages 28/29



Pages 30-33



Pages 34/35

In this issue

Pages 6-11 Generation Climate Change **Pages 12/13** Sunny technology for heating engineers **Pages 14/15** GreenTec
Pages 16/17 Variotherm Production. Logistics. **Pages 18/19** Stefan Forster - our new product overview
Pages 20-23 A really clever house **Pages 24-26** Sustainability with heart, mind and hard work **Pages 28/29** Successes
 and Ideas **Pages 30-33** A house made of straw **Pages 34/35** Martin Rührnschopf **Page 36** A Rising Star

Dandelion clocks and the climate change generation

Pages 6-11



**HEALTHY
WARMTH LIKE
THE SUN'S
RAYS**

Sun?

It's summer at last!

Warmth is something wonderful.

But heat can become a real problem.

What will happen if it gets even hotter in the future?

Common sense has long told us to use the sun as the main provider of energy for heating AND cooling. Oil and gas are in short supply – but the sun always shines. For EVERYONE.

The technology is available and well-developed. The

advantages are there for all to see. More and

more people are opting for the most

sustainable system around:

sunshine at last!

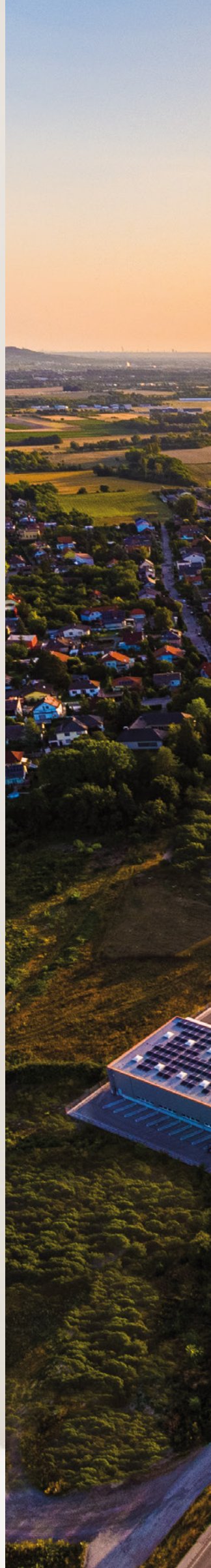
It's worth taking the time to think about it!

Hand on heart, says [Alexander Watzek](#)



This edition focuses on the energy from the

Sun.





*A sun house – the **Variotherm** headquarters*

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I'LL MAKE SOMETHING OF IT!

You notice something as soon as you walk in the door where Carina and Jonas live: this home has warmth. Another kind of life energy. Is it the warm welcome, the lovely summer's day, the honey-coloured wide oak floorboards or the special features of the building itself? We decide to find out ...



"In this case, the warmth comes from the wooden floor, as the heating is switched off" Carina laughs. However, the ceiling cooling, which you don't notice until you look at the ceiling twice, is up and running. The offset panel looks like an architectural design element. What you cannot see at all is the wall heating/cooling, with which all the outer walls of the building are clad. But we'll come back to that later.

Carina serves coffee – from the percolator. There are no aluminium foil capsules. That's also no coincidence. A love of the good things in life, an individual style and craftsmanship are everywhere to be seen. "We like to make as much as we can ourselves", Jonas says. "We are the climate change

generation. You might say that we're the latest version of home builders." They've moved away from the throwaway society, and are more interested in sustainability. They have furniture that has been donated or bought in second-hand shops, rather than mass-produced goods. They even made the beautiful wooden doors of the outbuilding themselves.

Is that unusual in these consumerist times? No. The throwaway society that was established after the second world war has slowly reached its peak. The reckless behaviour in society of the past 70 years is now taking its toll. The challenges the young generation now faces have changed radically over the last three years, with the pandemic,

“When I look out of the window, I see the young squirrels playing outside. I keep discovering new things in the garden. Sometimes we even have deer coming to visit.”

climate change and war in Europe. The consequences: huge price increases, delivery bottlenecks, inflation, exploding material costs, building costs and energy costs. More and more houses are being packed into living areas. It's become increasingly difficult to find free plots of land on which to build your own home. Affordable homes are needed, but even state-supported terraced housing has become extremely expensive.

The people who face the greatest difficulties are the young generation, who want to move in together, get married and have children. “I think we were very lucky that we had such favourable circumstances,” Carina says. That was before – two years ago, if not less. “Nowadays, it's hard to start building. Many materials cost a third or even twice the amount more than they did just a few months ago. Many of our friends can't build any more. Either they can't find a plot of land, or they can't afford the building costs. But that also forces people to be creative. Many of them decide to buy an old house and renovate it themselves.”

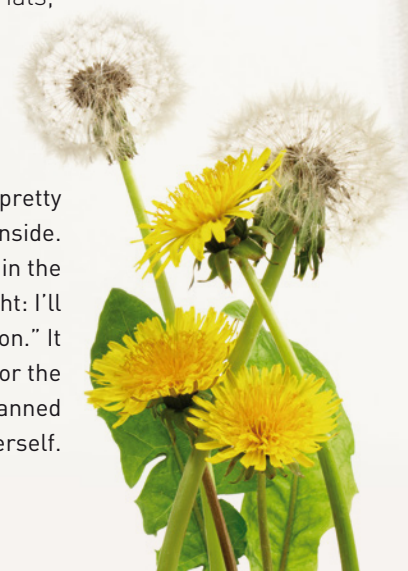
As a result of the pandemic, living in the country has become more attractive. Working from home



makes it a realistic possibility. This is reflected in the rise in property prices on the edge of towns and cities, as well as further afield. Life and work have changed. “Vienna is a wonderful city. But many of our friends are looking for new places to live. For example, one of them has been looking for a room in a shared house. A house with a garden in the countryside, where several people share the living space. It's a good solution. These aren't easy times. If we hadn't been so lucky two years ago, we'd probably have renovated an old house. Even so, compared to a home like ours, the long-term costs of a thermally refurbished old building are enormous. However, the rent for a fairly large flat in Vienna costs just as much as a mortgage for a house in the country. And at some point in the future, your home is yours to keep. That's why it makes sense to think long-term.”

“Luckily, we love making things, and we've built as much as we can ourselves,” Jonas adds. They've installed door frames, done the plasterwork and the painting, and pretty much everything else themselves. People who don't have that kind of talent, and who have to call in the professionals, face steep costs. “We do everything that we can ourselves. We watch YouTube videos and tutorials, and it works out alright.”

On the window sill, there's a pretty little glass with dandelions inside. “We had so many dandelions in the garden,” Carina says. “I thought: I'll use some for decoration.” It could stand as the life motto for the couple. By the way, Carina planned the entire house herself.





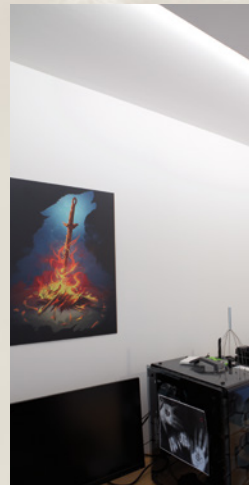
“I’m 24 and work as a kindergarten teacher. Jonas is 26, and is a qualified mechanical engineer who works as a technician. We weren’t prepared to pay for an architect. So I found an app, and used it to design everything myself.”

Ultimately, the building was created from ready-made parts with a timber structure. “Our home is a combination of prefabricated house and individual elements. We collected a large number of serious offers, looked at a lot of houses, and finally found the right supplier that enabled us to get the kind of flexibility that we needed. For example, we decided not to use gypsum boards for the interior cladding, and instead applied the Variotherm ModularWall and Modular-Ceiling module panels straight away. Everything is so seamlessly integrated that you don’t even notice the difference in the wall thickness. Right from the beginning, the spaces between the wooden beams were set in such a way that we could mount the ModulePanels without any additional effort. That meant savings of 20% on the building costs. Instead, we trusted the advice given by Variotherm and invested our money in highly efficient home technology.”

With his family connections, Jonas carries the Variotherm DNA in his blood. As a child, he already grew up with a different attitude and access to heating and cooling. He therefore has a great deal of basic knowledge about building technology to contribute. At least, that’s what we thought. “That’s not quite true,” Jonas protests. “I wouldn’t just see myself as a practical person. Of course, sustainability is very important to me. But when it came to calculating how much technical equipment we needed for our home, I put my trust in my brother Aaron, who works at Variotherm. Today, building technology is a highly complex, wide-ranging field. You need experienced installers and drywall construction builders who really work with the material every day and who are real experts.”

However, nowadays, it’s easy to learn how to build a home by watching assembly videos and tutorials. Carina and Jonas also use this cloud intelligence. “You watch a YouTube video, and off you go. That’s how we made our doors, for example. All you need is faith in your abilities. And then you just have to get on and do it.”

The pair decided not to have a cellar. “In terms of cost, the cellar is the most expensive room when building a house, as you have to excavate the earth and insulate it against damp. It’s not worth the money. And if you do have a cellar, you just end up filling it with old stuff. The same is true of attics,” Jonas says. “Our pitched roof is open to the rafters and has ceiling cooling/heating without a hollow space above. Instead, we have a small outbuilding with a workshop, storage area and a small garden bar for when friends come to visit. We’d rather invite our friends for a cocktail in the garden than down in some cellar bar.”



Invisible surface heating and cooling everywhere: Staircase, in the



Cuddling in the favourite corner – with the ModularWall in the

Garden outbuildings are becoming increasingly popular as an alternative to cellars. The beautiful wooden doors were made by the couple themselves.



At the same time, the decision not to have a cellar or attic is an anti-consumerist statement. “We don’t hoard anything. What we don’t need gets sold and goes back into the re-usage cycle. If you look around our home, you’ll see that there’s almost nothing here that we’ve bought new. We brought the furniture with us from our old flat. The box was given to us. We bought the fridge second-hand. We make a very clear differentiation between things that only need to be bought once. Take the kitchen. For us, longevity is important when it comes to furniture. And we have time and patience. We don’t need to have everything ready-finished and perfect. That’s why we make a lot of our things ourselves. The combination of the single parts makes our home feel more individual and cosy than choosing sterile interior furnishings from a catalogue”, Jonas says.



office and also in the shower

The living space is generous, but not oversized. The room acoustics are pleasant. “The quality of life is very different to what we had in our old flat. It’s much easier to get up at the beginning of the day. You prefer staying at home much more than before. You just feel more welcome. Our flat was very small, and you felt boxed in, but it was kind of cosy. In the house, we have much more room and space to breathe. It took me a while to get used to being here. But soon, I’d also found my cosy corner and favourite place to be in the house. I really appreciate the wall heating,” Carina says.



“You quickly get used to this new kind of comfort,” Jonas adds. “You don’t really notice just how unpleasant a room climate can be until you visit other homes”. For Carina, there is a wonderful start to every day. “I get out of the shower and step onto the pleasantly warm floor. When I look out of the window, I see the young squirrels playing outside. I keep discovering new things in the garden. Sometimes we even have deer coming to visit.”

“The cooling in summer is really amazing”, Carina continues. “During the first year, we overdid it with the cooling a bit, as we loved it so much,” she laughs.

Continued on next page >>>

back! Comfortable in the summer: Cooling with ModulePanels!

Total building and energy costs

Monthly running costs: €80



Incidentally, the couple moved in when the house was still a building site. What was ready? "The floor. We'd finished it the day before. The kitchen. The bathroom, without fittings and wash basin. The only door in the house was an old toilet door. The only thing that was really ready was the house technology. We moved in during the winter and had nothing. But it was a wonderful feeling."

À propos the house technology: a brine-water heat pump is installed with two deep-soil bore holes and a photovoltaic system. All of this is combined with Variotherm floor heating/cooling, wall heating/cooling and ceiling cooling/heating systems. The system functions completely autonomously all year round. Friends like to come and visit: "They say, hey! Your house is so cool! Every time we come, there's something new to see."

is that our house is around 150m² big. The two deep-soil bore holes, at 70 m each, cost around 10,000 euros. The 6 kWp photovoltaic system cost about the same. The remaining house technology, with a brine-water heat pump and the Variotherm complete system came to around 50,000 euros."

Compared to the overall building costs, the house technology is therefore relatively expensive. But financial support is available. The running costs later on are so low, that it's more than worth the investment in the long term.

As regards energy costs: "Until now, our monthly costs totalled 66 euros.

As a result of the oil and gas crisis and the increase in electricity prices, they now amount to 80 euros. Our overall costs for electricity, heating and hot water therefore total around 960 euros – for the whole year."



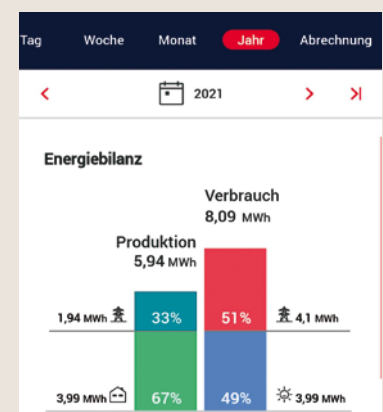
A view into the technical room



Other people have got into the habit of dropping by for a building site beer. I think this tradition will continue; everyone feels very comfortable here."

A lot of young home owners will be interested to know how much the house cost. "It doesn't make sense to count up the total costs in order to make a comparison. It's different wherever you go, depending on the plot of land, the location and the size of the home. But what's useful to know

At 8.09 MWh for the entire home, the annual energy consumption is extremely low. 50% of the total electricity used is provided by the 6 kWp photovoltaic system.



APRITEC

SUNNY TECHNOLOGY FOR HEATING ENGINEERS

The year 2000 didn't just mark the start of a new millennium. It also heralded a new era for contributions to the energy transition. Solar thermal energy and biomass were the next big thing, and offered an attractive alternative to the entrenched oil and gas fraction with forward-looking technologies.

It was an exciting time for company founders with a particular interest in sustainability.

Ronald Brunner (Head of Sales at Variotherm):

Dear Rupert, I am pleased that we are having this conversation. Over the past 22 years, you've built up a fabulous company here in your home town of Bruckmühl. Your son Max is continuing to build on what you have already achieved with the company. We know a great deal about each other professionally after having worked together. But there's one question I've never asked you: where does the name APRITEC actually come from?



Max Bernklau: In my view, our name reflects our approach better than ever these days.

We want to sell heating technology that doesn't rely on oil and gas as far as possible. We have never sold oil and gas boilers, even though they were always in high demand. However, in the interim, demand has finally started to focus on efficient heat pumps. Pellet heating systems, solar thermal systems and condensation boilers function at low system temperatures. With Variotherm,

we've found a partner who perfectly fills the gap when it comes to the system components we need in this area.

Rupert Bernklau (Founder of APRITEC):

Well, the basic idea was to support heating engineers by offering them sustainable building technology components. We were clear right from the start that we wanted to work with free energy sources such as the sun. The Latin name for sunny is APRICUS, and we combined it with the word "technology" to create the name APRITEC. We just liked the way it sounded.

Rupert Bernklau: There are some fantastic solar collectors and boilers available on the market. However, it's also important to have the right systems in place to operate them, which allow high levels of efficiency. My son Max noticed what Variotherm were doing long before I did, and drew my attention to them. He said: "Hey, look at this! I think they could be the right people for us!" However, it was not until we got to know Variotherm personally, at a trade fair in Frankfurt, that we knew for certain that we wanted to work with you. I think it was simply that the time was right for us to collaborate.

A particularly sunny team > APRITEC <



Ronald Brunner: Since then, you've also discovered the entire range of complete systems, haven't you?

Max Bernklau: Exactly. The advantage is simply that Variotherm offers a very large number of solutions for buildings. Everyone who has an interest in the field has heard of your dry floor heating. However, the surface systems for walls and ceilings, which also include the heat pump, are also well known. A lot of people don't know that you can also use the system to cool buildings.

Ronald Brunner: Your customers are installers and heating engineers. You supply them with heat pumps and components. How important is it for you for your product range to include complete systems, and not just individual products?

Rupert Bernklau: Our aim is always to find the right solution for a building. Naturally, we can tell the installer that we have heat pumps that can generate high temperatures, and simply sell them that way. But that's not how we do things. We tell them to take a moment to think. It's much better to have a wall heating system that runs on lower temperatures and which as a system uses much less electricity!

Ronald Brunner: You also have a lot of experience when it comes to building renovation projects. What are your plans? Supplying systems for building renovation, or for new buildings?

Max Bernklau: The fact is that here in Germany, we're experiencing a bit of a logjam when it comes to building renovation. There are a large number of oil and gas heating systems that are 20 or 30 years old. We'll have to resolve this sooner or later in order to drive the energy transition forward.

Ronald Brunner: Usually, heating engineers tend to complain that they are fully booked with orders - but that they don't have enough staff, or that the products they need aren't available. That means more stress, more pressure and higher prices. How do you deal with this situation?

Rupert Bernklau: We want to make life easier for our customers by delivering a complete system in which all the components are perfectly coordinated and which is easy to operate. We also offer the full range of warehouse services and a fleet of vehicles so that we can store the goods as needed. This means that we can reliably supply products to our customers when they are needed at the building site.

Currently, ability to deliver is a far greater challenge than it was two years ago. That's why it's more important than ever before to have reliable producers as partners.

Ronald Brunner: You're a family business run by a father and son, with a young, very dynamic, creative team.

Max Bernklau: Yes, it's true. We've been able to recruit great new people and to get them enthusiastic about sustainability as a company philosophy. Generally, it's hard to find good staff. But my feeling is that young people can easily identify with our ideas and what we do, which is in keeping with the current zeitgeist. They're highly motivated, because they understand the reasons and the necessity behind what we do.

Ronald Brunner: What about customers? Are they also as open-minded?

Max Bernklau: To be honest, a lot of heating engineers resort to the standard products - at least, if they're not given proper advice. They opt for oil, gas and perhaps floor heating systems. For many of them, however, wall and ceiling heating is uncharted territory. This is where we provide ongoing information and advice. It's an enjoyable challenge.

Ronald Brunner: What are your tips for heating engineers in view of the latest global developments?

Rupert Bernklau: They should also regard the challenges we are now facing as opportunities to offer their end customers products that are sustainable and in keeping with the times. We create so many great systems with our heating engineers. But often, the end customers don't even realise how much added value they offer. Installers also need to provide more information to their customers in this area, and to draw their attention to new opportunities.



APRITEC www.apritec.de
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zukunftsweisende Haustechnik

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83052 Bruckmühl/Heufeld

New products and technologies for heating, cooling and ventilation are increasingly replacing out-of-date oil and gas heating systems. More and more women contributing to the development of the GreenTec sector with their technical and professional skills.

GreenTec: a woman's world

Kim Vaessen
CEO Climatrix



How do you become a successful GreenTec businesswoman?

Even as a child, I was full of admiration for my parents, who were entrepreneurs through and through. After studying economics and marketing, I joined the family business, and entered into the world of sanitation and heating installation. I have always closely followed developments on the market. That's how I ultimately got the idea of founding Climatrix, a company specialising in floor heating and climate ceilings. Today, I'm the manager of my own highly successful company.

What do you love about your job?

When I have a new idea, I immediately start brainstorming. My team always laughs at me, but I love it. I quickly recognise opportunities, and turn them into reality. For example, in 2015, customers told me that they are happy to buy our systems, but they don't have the time to assemble them themselves. That gave me the idea of creating an assembly team to support my customers on site. It was an instant success. Our additional service offer gives us a big advantage over our competitors. We now have a team of 10 people who assemble our systems for our customers.

What do you want to achieve in the sector and in society as a whole through your work?

When we founded Climatrix 11 years ago, we first had to persuade installers to choose our energy-efficient, low-temperature systems. Now, the situation is completely different, and sustainability is cooler than ever before. We no longer focus on just individual products. We're more interested in the overall sustainability of each project. We want to show that sustainable heating and cooling is a better choice for the environment, as well as for our customers' budget and comfort.

What fascinates you about your GreenTec job?

I love being involved in the strategic development of our company. My area of responsibility includes all the company's accounting and administration work. I use my business and technical skills to add exciting new products to our range and to establish future-oriented technologies and systems on the market here. In my opinion, environmentally friendly approaches to heating and cooling should be promoted more strongly. Primarily, this contributes to the energy transition, to saving resources and helping the environment. Naturally, however, these new products also offer outstanding market potential and opportunities for growth.

How can the heating-ventilation-cooling sector be made more attractive to women?

My advice to tech companies is: talk to potential female applicants while they're still in training. Go to the schools and present your sector in a targeted way. When young women who are talented young technicians leave school, they often end up in other jobs. It's simply because they have no idea how many interesting offers and opportunities there are out there in the field of technology.

What can men in technology professions learn from women?

I think that women are good at involving members of a team in an equal way. This usually requires more respect, empathy and mutual consideration. As a man, it's not a sign of weakness to ask a woman for advice.



Emma Worrall
Director UFH1



men's domain

Monika Brezovszky
Engineering Variotherm



VARIOTHERM

When did you discover your technical talent?

Technology was something I grew up with right from the beginning. As the daughter of a chimney sweep, I already learned a lot about the work of my father's business from a very young age. This laid the foundation for my later training at the higher education college for business and the environment. During my studies, I was particularly interested in chemistry, physics, environmental technology and quality and waste management, combined with accounting.

When did you start working in the heating-ventilation-cooling sector?

My love of "renewable energies" already inspired me to intensively study this area of technology 22 years ago. I first deepened my knowledge while working at various planning offices, including construction site supervision. 16 years ago, I took my first steps into the fascinating field of surface heating and surface cooling systems. I draw on this experience when processing the technical side of our customers' orders and enquiries.

How can the heating-ventilation-cooling sector be made more attractive to women?

Companies need to be open and honest towards women. They need to offer insights into different areas of activity and options for professional further development. There are a lot of women working in technology. It would be helpful to use them as role models, to put them in front of the curtain and say something about them.



Martina Rolinková

Office Manager & Managing Director / Varioteam

What do you love about your job?

In my company, I'm office manager and managing director in one. I like to communicate directly with people. My big aim is to increase awareness of our systems on the market, through both media and face-to-face consultancy.

Is GreenTec still a purely male domain?

No. Of course, every company has a different personnel structure. But I think that nowadays, women find it easier to integrate in technical professions and companies than even just a few years ago.

What can men learn from women in technical professions?

Mutual tolerance. It's important to really listen to the opinions of other team members, and to respect them. Unfortunately, that's not always the case. I therefore advise women who are starting out in these professions to stay strong and focused on what they want to achieve.



VARIOTEAM

ALL IN STOCK!

Delivering products is a tricky business these days: A large number of raw materials are low in stock on the global markets. Also, there are not enough staff, and waiting times appear never-ending. You might think that everything isn't as easy to come by as it used to be.

However, Variotherm customers are lucky, since the company has always pursued a basic policy of keeping items in stock. Thanks to intelligent warehouse storage, the delivery of further products to the construction site is secured. To make sure that this continues in the future, and that service is even improved, Variotherm is currently expanding its warehouse capacities.

Two storeys with 1,345m² of extra space make it possible to store preliminary materials and finished products. That's an enormous area, which is integrated perfectly into our logistics system with its cellar and ground floor.



Efficiency is everything. That also applies to the effective use of roof surfaces. The existing photovoltaic system will be expanded by an impressive 100kWp. A solar storage battery is also planned for a later stage in the future. We'll see what the future brings. One thing is certain: Variotherm is excellently prepared for all eventualities.

The new warehouse was designed by the tried and trusted team at E3 Architekten, who already designed the building for the new Variotherm headquarters. Therefore, function doesn't just meet design here, but also sustainability. Completion and commissioning are planned for 2023.



ALL IN

PRODUCTION!

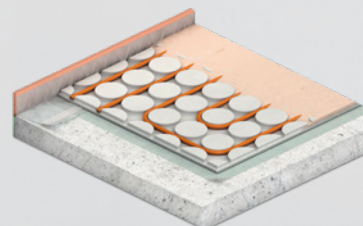
The level of demand for the super-slim VarioComp modular floor heating system for drywall construction is enormous. Why is that? The system simply has unbeatable advantages, such as the low construction height of just 20mm.

Innovative installation companies swear on the VarioComp and like to have it ready for delivery at short notice. This increases the pressure on production, since naturally, this high demand needs to be met without bothersome delays.

Here, the new production line in Leobersdorf will contribute greatly. It is due to go into operation at the end of the year. Two new milling machines will provide a real boost to production speed. The previous machines used were already extremely efficient, but the new plant will consume considerably less

energy. This is made possible by the improved construction design and the reduced weight of the construction elements.

When it comes to production quantity, the new production line can easily compete with the previous machines used. The expansion of the automated warehouse system means that we can provide a perfect service.



Gernot Baumgartner/Variotherm Head of Production & Logistics planning with Plant Manager Franz Rupsch from Berndorf Sondermaschinenbau

MUCH LOVE VASILE!

If there's one person who embodies energy and hard work, it's Vasile.

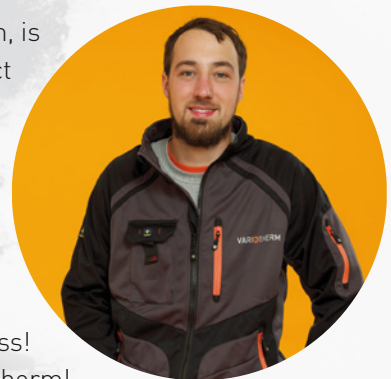
How do you build up an entire company? With an incredible amount of energy, perseverance – and with your own bare hands! In Vasile's case, this is literally true. 33 years ago, it was Vasile who built the Variotherm headquarters, brick by brick, from morning till night. When he joined Variotherm in 1984, his talent for one thing immediately stood out: while other people were still talking, he would already have a practical solution to hand, and would immediately start making it a reality. His first area of work was pulling louvres over the skirting heating systems. At that time, it was a difficult manual job that required an enormous amount of physical strength. For Vasile, that wasn't a problem. One of the first Variotherm products were the legendary storage stones. Countless numbers of them have passed through Vasile's hands. With his energy and hard work, he was also a big support when it came to international projects. For example, he laid underground absorber pipes on Rhodes. He was a reliable presence in the production and logistics departments. His motto, then and now: less talk, more action. As a friend and colleague, he had the kind of strong work ethic that is rarely found today. We wish him a well-deserved rest in his retirement.



ALL DONE Basti!

At Variotherm, **a man** who is as productive and hard-working as Bastian, is in the right place. Ideally in production, where he can make the perfect contribution with his many talents. What we particularly admire is that even in his free time, Bastian works hard to develop his skills further, and is always looking for further training opportunities. On top of his demanding everyday life, he managed to obtain his Matura school-leaving certificate after attending part-time courses. It's an enormous achievement, of which he can be very proud.

Our heartfelt congratulations on this major success!
We're sure that he'll go a long way at Variotherm!



ALL THE BEST ALFRED!

Do you know the joke? A man with a donkey and a honeycomb under his arm enters a bar and says... We'll keep the punchline to ourselves for now. But you can be sure that when Alfred with his dry sense of humour tells one of his jokes, he has everyone in stitches. Humour and a joy for life are what makes him what he is. When he joined the logistics team at Variotherm 7 years ago, he immediately created a fun atmosphere.

Now he's entering retirement. We'll certainly miss Alfred's tasty lunches, which he ceremoniously prepared every day. He would then hold court at the end of the table and entertain everyone around him with his cheerful singing and whistling. He's not really retiring. As a super-grandpa, he will now have more time to spend with his beloved grandchildren.



Stefan Forster

His pictures are a homage to the incredible beauty of nature.



Stefan Forster spent most of his childhood surrounded by nature. At just 18, he spent three weeks walking through the southern uplands of Iceland, crossing deep rivers and glaciers, and discovered his love of photography there. "We are living on an unbelievably beautiful planet. Anyone who has seen the countless wonders of our huge yet fragile Earth can want just one thing: to protect it."

Quote: Stefan Forster

We were allowed to acquire six pictures by Stefan Forster and to reproduce them in our product overview over the whole format. Variotherm is always looking for the respectful and extraordinary.

Stefan Forster is not one of those photographers who assemble images in Photoshop. For him it is very important to catch the right moment by constantly returning to it. So it can happen that Forster visits one and the same place again and again for years until the light is right. When the photo once is in the box, it is digitally developed, but never altered. To the purist it is important that his pictures reflect the recording 1:1 and that the image is not manipulated. Due to his profession as a tour guide for photographers, Forster also has the luxury of seeing and photographing the same places all over the world year after year and waiting until the light is right. A visit to his website is worthwhile: www.stefanforster.com

Some time ago, Jürgen Zwingl, Creative Director at Variotherm, was on holiday in Iceland. On his journey home, he discovered the first book by Stefan Forster, "Chasing Light", in a small bookshop. The honesty of the images, the story behind them and the respectful treatment

of nature not only impressed Zwingl, but also the Managing Director at Variotherm, Alexander Watzek, who was immediately enthused by the idea of purchasing some of Stefan Forster's photographs. The purchase was made during the pandemic. It was a difficult time, and both sides were very happy with the outcome. Since then, a friendship has evolved between Stefan Forster and Variotherm. However, it's not just his pictures, photo expeditions and workshops that are unique. His drone images, such as of the Fagradalsfjall volcano, which erupted in 2021, his lectures and his incredible animal photographs can be seen and admired across all media.



Volcano



Arctic fox



*This young arctic fox wanted to take a closer look at Stefan near Greenland and out of curiosity bit into his sun visor.
Scan the QR code and watch!*



The new Variotherm product overview in A2 format



Win
Win one of 5 books
by Stefan Forster. Just enter
and send us an email with the
subject "Polarfuchs". Winners
will be notified. >>>
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A REALLY CLEVER HOUSE

Omid Farassat had one idea in mind: to build a really clever house. He's created a living environment that isn't just an architectural delight, but which is above all also really smart, really energy efficient and really sustainable.

In the heart of beautiful Carinthia, Omid Farassat has exceeded even his own expectations. In 88m² of smart living space, Farassat has built a house that meets all the standards for sustainable building. The wooden timber building not only does without crude oil-based building materials, but also extremely energy efficient and entirely barrier-free. Farassat, who works in the building industry himself, has planned the unusual home for his later years. As soon as the children have moved out, he will move home. For Farassat, sustainable building therefore also means building for the future. He has found the perfect partner in Variotherm and Peter Unterrainer, who is responsible for sales in southern Austria.

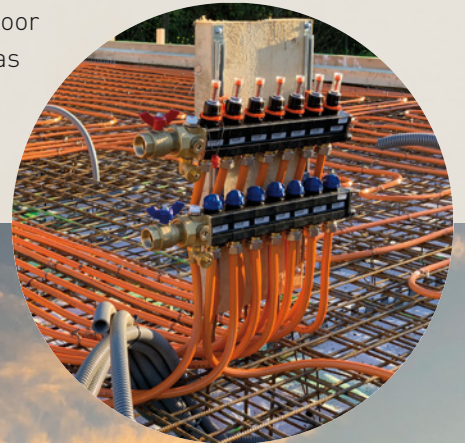
Peter Unterrainer: I remember, Omid, how you came up to me and told me about your idea...

Omid Farassat: ... and I can remember that right away, we had very similar ideas about how to realise the project! I was clear that I wanted my home to be energy efficient, sustainable and also comfortable and welcoming throughout. That's why I wanted only the best solutions for heating and cooling.

Unterrainer: All you need are floors, walls and ceilings, and our systems!

Farassat: Exactly! *(laughs)* You created a great concept with floor and wall heating, as well as ceiling cooling. You said I

Concrete core activation with the VarioSolid and the VarioManifold 5.0



Ceiling cooling in the bedroom: very fine,
no draught, no air conditioning.
Simply healthy and ingenious.

was an unusual customer, because I didn't want the
cooling in the floor as well.

Unterrainer: Correct! Whatever the time of year,
no-one wants to have cold feet!



Cool walls – cool atmosphere!

Farassat: That's why the ceiling cooling makes sense. It's simple physics! You have a great planning department. That was what really did it for me! I wanted to build without making compromises, and you quickly understood that my home wouldn't be a normal project.

Indeed, Farassat's house isn't a normal project, although he claims that you could reproduce it elsewhere. That's why it has been open to the public for the last two years. It's possible for anyone interested to see on site how sustainable ideas are put into practice. For example, Farassat uses his own "power station", consisting of a photovoltaic system, a heat pump and a high-capacity battery. That enables him not only to heat and cool, but also to charge his electric car.

Continued on next page >>>

Experience the installation
of a ceiling cooling system in
fast motion. Scan QR code
with your phone!



The builder has also installed many sensors in his house - on the one hand to ensure an optimal indoor climate and on the other hand to enable a safe life in old age.

A house that thinks of everything

Smart control for the entire house



Unterrainer: How do people react when they enter the house?

Farassat: They feel very comfortable to be here! The entire house is smart and in keeping with the times. For me, it was always important that the technology installed in the home is invisible. The people who live there should simply feel the benefits. A lot of people who build houses have a lot to think about, and can usually focus on their current needs at most. They don't consider the fact that they might not be as mobile in the future.

Unterrainer: You've created a really good basis for



The PV system supplies free electricity to the electric car



Technology that inspires. Heat pump, storage tank, inverter and two VarioManifold 5.0

living here when you're older.

Farassat: It's true. We took a very long-term view. For many people, their house simply becomes too big when they reach old age. My home is a refuge that is designed to meet my most important needs.

Unterrainer: You thought about so many things when you built the house, from organic building materials to choosing the right building partners, to greening the roof. It's hard to summarise it all in just one conversation. You have to see it in real life! But how would you describe your home in a single word?

Farassat: It's a clever house! Building a house means adapting it to your own needs. For me, this is THE clever house – for now and for the future.



The clever house can be visited in Althofen/Carinthia – in Austria.

If interested:
marketing@variotherm.com
omid.farassat@gmail.com

SUSTAINABILITY WITH HEART, MIND AND HARD WORK

“It’s cold here! Can you feel it too?” When Alfred Strigl talks about room climate when he visits companies, he means more than just the number of degrees on the thermometer. Together with his partner Sylvia Brenzel, Strigl advises companies on how to operate more sustainably. Here, the two sustainability experts naturally combine environmental and economic aspects with social issues. In a warm conversation with Eva Demuth, Head of Office and Finances at Variotherm, they told us more. A conversation about pure sustainability, fertile soils and a big portion of trust.



Alfred Strigl and Sylvia Brenzel talking to Eva Demuth

Alfred Strigl and Sylvia Brenzel are obsessively positive, refreshingly different and sustainably encouraging. For decades, they have been engaged in a field – sustainability – that today has become a fashionable addition to nearly every advertisement you see. And yet – or perhaps precisely for that reason – they both exude an enormous

amount of energy and motivation for their work. After working in research, Strigl and Brenzel founded the business consulting firm plenum around 14 years ago, in order to actively make sustainability a reality. “Sustainability has to be done in practice. You need large lighthouse projects, but also small sustainable improvements that are easy to achieve and that are great fun to

do” Strigl explains. “With screws and tools, for example, engineers are in just the right place to put sustainability into practice.” Eva Demuth is also convinced that anyone can easily make their small contribution: “We want to support our Variotherm partners and installers when it comes to sustainability. At Variotherm, we have lived and breathed sustainability since we were

found, even if at that time, a word hadn’t yet been found for it”. Although everyone talks about sustainability these days, there is often a lack of authenticity when it comes to this complex term. That’s why at Variotherm, sustainability has a name of its own: P:UR. It doesn’t just stand for pure essence, but also for potential, something original and respect.

Pioneers of change

To enable people with sustainable ideas to develop their potential, Brenzel and Strigl have set up a non-profit association together with like-minded people, Pioneers of Change, with a focus on education for sustainable development. “In recent years, we worked hard to enable sustainable solutions fall on fertile soil and to take root,” Brenzel explains. Their mission: not to get too caught up in theories, but to be active.

This also involves a certain amount of courage, she says: “We want to encourage people to become pioneers of change! With Pioneers of Change, Brenzel and Strigl aim to motivate people in developing their potential, finding their vision and creating innovative, civic society initiatives, and to support sustainable companies. A key aspect of their work is the creation and

promotion of sustainable networks. Strigl therefore advises companies to use different networks and not just stay in their own “bubble”. “Have the confidence to build cross-bridges! We see in nature, that it is at the borders and transition points between systems, such as on riverbanks or the edges of forests, that biodiversity is at its highest level. Diversity is stability – and that’s an important resilience factor.”

Enthusiasts for the good life

À propos resilience: “How do you manage not to lose your passion and energy for sustainability in the face of the destruction of the environment?” Demuth asks. “It’s exhausting banging your head against a wall. For years, we have been working to raise awareness of sustainability.

For me, it’s much easier today than it was 20 years ago, because we see a large number of projects now

Continued >>>



that offer alternative solutions and answers to the challenges of our time”, Brenzel says.

Strigl also believes in a positive future, also because he simply doesn't want to think negatively: "Humanity is an enormous force. We powerful humans can create incredible things. I have a basic trust in humanity, that step by step, we will overcome the challenges of our time." However, it is often not clear where and how the next step towards sustainability and future-oriented activity can succeed.

Demuth has a good tip: "When we talk about sustainability at Variotherm, I always say: all you need is a heart and a brain ... and a hand," Brenzel adds, smiling. For all three, Brenzel, Strigl and Demuth, knowledge, love and action are inseparably linked. It's a very similar story when it comes to economic, ecological and social aspects of sustainability: "If we don't put all three aspects into practice, we will be spat out of the system one day, and will not be able to survive in the long term",- Demuth says.

Even small improvements make a difference when it comes to sustainable business management. Here are some examples of specific measures you can take in your company:

- 1) **SUSTAINABLE OFFICE EQUIPMENT:** From eco-certified paper and recyclable stationery to green office technology, make the switch now to fair office equipment and environmentally friendly cleaning agents for your sustainable everyday office life.
- 2) **RE-USE PACKAGES:** Think about how you can use packaging material within or outside your company. Cardboard boxes, PET tape and plastic materials are far too valuable to simply throw them away.
- 3) **REGIONALITY TAKES PRIORITY:** Sustainable business management starts in your region. Choose regional products instead of long transport routes when making purchases. Eating lunch at the local restaurant also promotes regional development.
- 4) **GREEN FLEET:** Switch to electric cars and make journeys to your customers sustainable. Combined with a photovoltaic plant, such as on your own warehouse roof, you can produce your own climate-friendly electricity yourself.
- 5) **SALARY DONATIONS:** Implement small but efficient socially sustainable projects. One way of doing this is via voluntary salary donations. At the end of the year, you and your staff decide which projects you want to support.



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INNOVATIVE THINKERS. WITH A LONG TRADITION.

A tradesman who in 1994 set up his own business with a clear idea in mind. Someone who doesn't give up. Whose driving principle is to give everything it takes for his customers. That's how good stories begin. Stories about successful company founders with a cool head and a broad outlook.

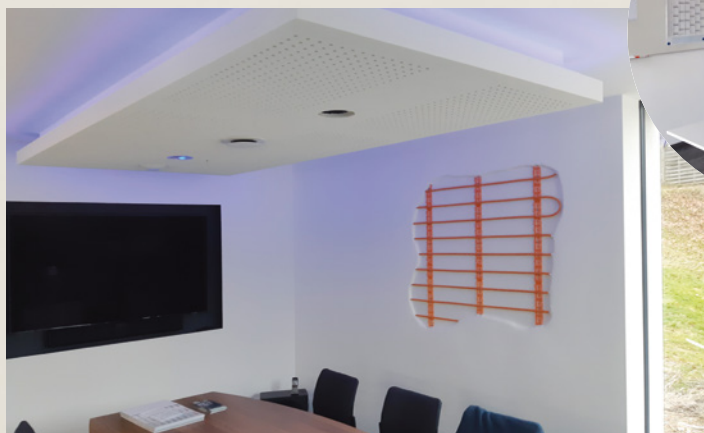
"What do you need to start a business? At first – a good idea and a strong belief in it. Humility in good times. Perseverance on hard days. Partners you can rely on. And a team that is willing to build up the business together." Willi Dietrich and his son Sven have more than succeeded in this. From heating, sanitation, electrical equipment, photovoltaic and solar

planned with every aspect in mind. Above all, you need to exchange information with experienced and skilled partners."

The fact that the company relies on the expertise of Variotherm partner Wärmetechnik Junker is reflected in the fittings in the office and showroom building.

Jakob Ebert knows more about this than anyone else. As a contact partner of Wärmetechnik Junker, he was on hand

The high-quality equipment includes cooling acoustic ceilings



Usable floor space of about 500 m², distributed over 3 floors

thermal energy systems, to interior Dietrich GmbH offers customers everything from a single source.

And yet, there is one key element in which this traditional trade company differs from many of its competitors. "We have never allowed time to stand still. Doing something simply because that's how we've always done it is just not our way of working. We have become so successful because we have always continued with further training - for ourselves and our staff. We have always been interested in new solutions and technologies. Our motto has always been to offer the best solutions for every project. That includes having partners such as Wärmetechnik Junker, who have innovative systems in their product range!", Willi Dietrich, the senior director, explains.

Sven himself remains modest. "I just do everything necessary to keep up with the latest developments. Our focus is on full refurbishment. To do that, you need all-round knowledge. And complete systems that are

to give advice when the showroom was being planned. "Here, Willi Dietrich GmbH integrated Variotherm technology and demonstrated its advantages to such a high degree that it's really a joy to experience the impact of the systems presented in person.

Over three floors, the cooling acoustic ceiling, floor heating and many other products from the Variotherm world are presented in perfect combination with contemporary building technology!"

"Willi Dietrich GmbH has integrated Variotherm technology so comprehensively that it is a pure pleasure to experience the effects of the systems presented!"

Jakob Ebert / Wärmetechnik Junker



MORE SPACE. FOR RESEARCH & DEVELOPMENT.



It might sound surprising, but as a business, it's not a matter of course to have your own research and development department. The costs are high, and you need rooms that are suited to the purpose. For this reason, a lot of companies outsource this area of their business. Variotherm is committed to development created

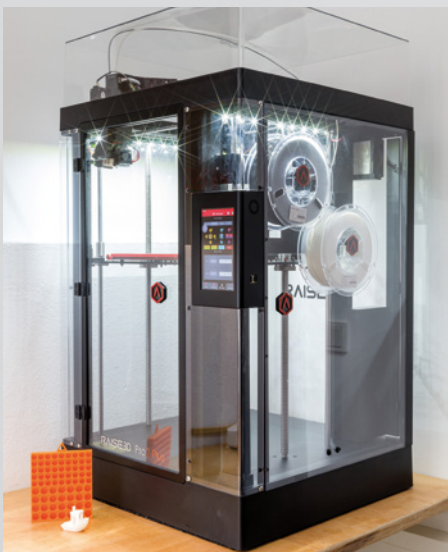


in-house, however, and continues to expand its research department. The goal is to guarantee continuously reliable quality, to research the level of comfort created by the projects, and to make assembly and adaptation easier for installers.

GRAPHIC SOLUTIONS.

IN 3D PRINT QUALITY.

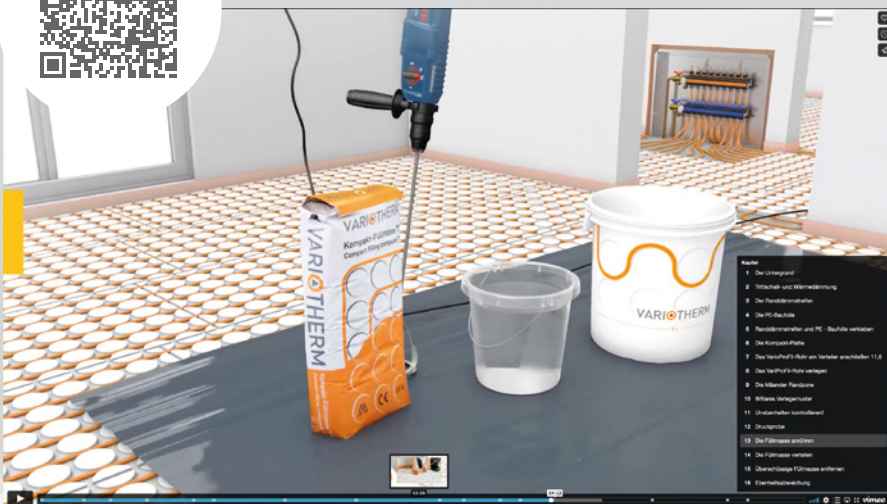
A 3D printer is a pretty practical item to have around! Our R&D team loves their newly-purchased machine and uses the technology to design samples and small parts. Thanks to the printer, new ideas quickly take on a tangible form. With the home-produced prototypes created, a lot of small details can be improved in terms of appearance and feel. We think it's worth making the investment, as development and introduction periods for products are significantly reduced, even after a short time!



SIMPLE INSTALLATION.

VARIOCOMP VIDEO INSTRUCTIONS

You can find the complete VIDEO on our homepage or simply scan the QR code with your mobile phone!



It's a well-known fact that Variotherm systems are quick and easy to install. Even so, there are a large number of professional tips and tricks that have been gained through practical experience, which make the work even easier. In our new installation video, we explain how to achieve the perfect result, step by step. With easy to understand animation and real-life sequences, we show you how to handle Variotherm products in an entertaining, realistic way. Do you want to find out about a specific work step in detail? Simply click on the relevant section in the video!

Is it true, as we say in German, that paper is patient? Not when it comes to the environment. The paper-making process consumes vast quantities of fossil energy. At Variotherm, we have been taking steps to reduce the amount of paper we use for a long time now. Since May 2021, we no longer print out the details from our bank account statements. That alone saves 600 sheets of paper every year. Since January 2022, we have also stopped printing out data carrier support notes. As a result, we saved around 500 sheets of paper in the first half-year alone. Overall, we aim to save around 1,600 sheets of paper this year. It's a small reflection of how seriously we take sustainability.

SAVING RESOURCES. WE HAVE STOPPED USING PAPER.



20 years of the Bridge Run

It's THE running event of the year, in which Variotherm is at the starting line every time. This year, the Bridge Run was held for the 20th time. In this anniversary year, the result for the Variotherm team was particularly gratifying. Gernot Baumgartner, Johannes Kowald and Ronald Brunner came in third place. We congratulate them on this outstanding achievement!

Waldviertler Eisenmann

Litschau is one of the coldest local regions in Austria. It takes cool sportsmen and -women to tackle the tough conditions of the Waldviertler Eisenmann triathlon. The Variotherm running team wasn't put off, and successfully participated in the event. They wore triathlon race suits designed especially by Variotherm. The new race suits led to top results, with Variotherm taking first place in the mixed relay event. Uranyi Sandor came in sixth, Thomas Schüller seventh, and Nicole Metz took twelfth place in the women's event.



E- bikes

Have you ridden an e-bike? Give it a try! Cycling has never been such fun. More and more people are choosing to leave their car at home and travel to work via e-bike instead. Variotherm also has three more "power bikes" that are available free to staff to get on and pedal off whenever they want.



ONCE AGAIN. VARIOTHERM SPORTS.



The Variotherm ironman: Willem Maat

Among triathlon enthusiasts "Frysmen" is one of the most well-known ironman. Against the fabulous backdrop of the IJsselmeer, he succeeded in reaching the finish line in just 12 hours, 6 minutes and 49 seconds.

An outstanding achievement!

IT DOESN'T MATTER. IT'S ONLY STRAW!

That small plot of land in Baden? That was always there. It always belonged to the women in the family. Now, Victoria is building a house there, with her husband Lukas and Emil, the most relaxed baby in the world. "A one-month-old mini beginner baby", Victoria says, grinning. "He feels totally comfortable here – in our house made of straw".

Interview with Victoria and Lukas, Written by Paul Szimak, Photography: Reinhard Gombas



From the outside, you might think that this is a sweet country house that has been lovingly restored. Yet that is also just an illusion. As Lukas explains: "Before, there was just a field here. It only has an old appearance, but the only thing that's conventional about this building is the concrete foundation slab. On top of the slab is the wood structure built in the block style." Once the structure had been completed, a local farmer turned up with his tractor. At the back, he was carrying compressed straw bales. "Within a single day, we'd insulated the spaces between the spars with the bales, with the help of 18 other people. It was a pretty good DIY project!"

The wooden windows have round embrasures. The edges of the house are also round. It's an unusual building style. We step over the threshold. It smells good – of wood, straw, and reeds. There's also a whiff of apricots. The beautiful apricot tree provides shade in the garden and is now full of sweet fruit. "It's a very old variety. The apricots taste good. Do you want to try one?" It tastes delicious. We also immediately felt comfortable in this house made of straw and loam.

Although the word "house" doesn't really apply. The ensemble is still just a building shell. Yet it's the most beautiful and natural shell we've ever entered. A building made of wood and straw? Almost without any bricks? It makes you immediately think of the big bad wolf and the three little piglets. Can it really compare with modern building methods? Indeed it can. And how!

Victoria adds: "I'd always wanted a natural-style house. But without Lukas, I'd probably never have had the courage to do it." It might come as a surprise that Lukas of all people had the idea to build a house made of straw. He studied at the technical university in Vienna. He completed his Masters degree at the higher education college at FH Burgenland.



The EasyFlex wall heating/cooling optimally applied!

Since then, he has worked there as a researcher and higher education teacher. His area of specialism is building technology. We ask him whether in his view, people already knew two hundred years ago how to build houses using natural materials and to a high standard of energy efficiency. In fact, they did: for him, there is no question that straw, reeds, loam and lime offer outstanding advantages. "However, my field is not construction physics. Rather, my work focuses on the energy efficiency of buildings," he stresses. He then says something surprising: "Personally, the low-tech approach is the one I like best. I mean making things simpler again, so that they don't break so easily and function for longer."



A high-tech scientist who likes low-tech solutions? We take a look around us. Electric blinds or folded louveres? Not one in sight. Instead, there are window shutters that can be opened out. They stay solid for ever. Thanks to the roof over the west-facing terrace, the sun is screened out and the heat stays outside. Old knowledge, combined with the most efficient building technology around for heating and cooling. That's the recipe for success.

His wife Victoria also has a good eye for what really matters: "If you take a closer look, you can see that the whitewashed façade of our house or the hand-modelled loam plaster interior walls are not entirely straight. If we had to pay a penny for every wall that wasn't straight, we'd be deep in debt by now", she says, laughing. "But for us, it looks like the buildings in Greece. Like a romantic, whitewashed house on Santorini. Organic shapes instead of boring sterility. We just love this kind of style!"

The "window of truth": many people who build straw homes leave a "window of truth" as a visible sign that the building really is insulated using natural materials. "Otherwise, nobody will believe that we really did insulate the house using only straw," says Victoria.



But let's go back to the beginning. How do you actually build a straw house?

"The first step is the same as for other kinds of houses. You start with a simple concrete foundation slab," Lukas explains. "That forms the base for the block wood construction. For this, we chose uprights made of solid wood. However, that wasn't just for ecological reasons. Glue laminates are currently hard to come by, and have become much more expensive. Inside, we used cladding made of OSB boards. We then spent a long day with our friends cramming straw into the spaces that were created. The important thing is that the material is dry, cleanly threshed and really pressed tight. Incidentally, the straw comes from the local area, from a

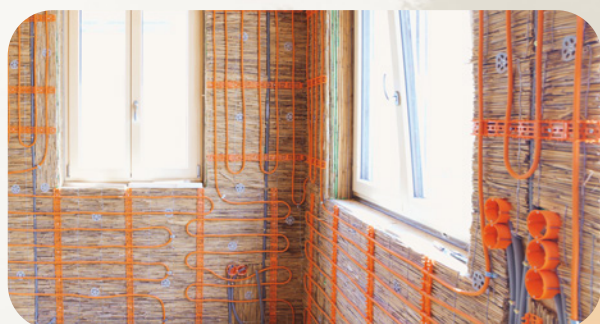


farmer from Lower Austria. And the reeds? From Lake Neusiedl."

A breathable cover was wrapped around the outside façade to protect the building shell in the winter. However, this wouldn't have been necessary if the plasterwork had already been completed. As a next step, the raw formwork boards were mounted on the outer side. These in turn served as a base for the reed mats. This was followed by the rough plaster, net plaster and fine plaster, and finally the coat of pit lime paint. That's all there was to it.

The pit lime was mixed by hand from sand and chalk. "The idea behind it was that the plaster is very porous. It can absorb water and release it again," Lukas explains. "Pure straw from the field offers a great deal of advantages – but also has one disadvantage: it mustn't be allowed to get damp,

Continued >>>



Reed mats are attached to the inner walls. The Variotherm wall heating/cooling pipes were directly mounted on them. Combined with the loam plaster, this guarantees a unique, comfortable climate throughout the home.

or it will begin to rot. You have to be absolutely sure that the straw is dry. It has to be stored only in dry places and has to be installed in the right way.

The wall heating/cooling is mounted to the outer walls, while floor heating is planned where tiles will be laid. Screed is only used in wet rooms. **“We decided to go for drywall construction. Most of the wood used comes from an old wooden floor that we lifted up in Vienna.”**

The old wooden beams in the walls used to belong to a mill in Mödling. **“I screwed the boards into the wall with my mother while I was still pregnant,”** Victoria explains. The supporting pillar in the living room is also unique. It’s an impressive trunk from an ash tree that used to grow in Stift Heiligenkreuz monastery.

The round brick wall in the ante-room is a real showstopper. The couple built it themselves, painstakingly, by hand. **“We took one hour for every row. Every individual brick had to be cut to shape. Just count how many rows there are. If I’d known how long it would take, I’d never have done it,”** says Lukas, sighing. **“But the result is just amazing,”** Victoria adds, beaming.

The only bricks are in the part next to the neighbouring house. The only reason they are there is because of statutory regulations. However, in terms of fire hazards, compacted straw and solid wooden beams have relatively low flammability. **One interesting point is that the house stores more CO₂ than it uses, thanks to the natural building materials. This therefore more than compensates for the CO₂ footprint from the bricks and foundation slab.**

There is also no attic. Instead, there’s a living room with a ceiling that goes up into the roof, with an impressive 7 metres of air space. **“We didn’t want to create storage space for stuff that we didn’t need. On paper, the floor space for the house looks very small. When you see it in real life, however, it’s surprising how big it actually is. All the architects we spoke to first told us that the house was too small. But we made a conscious effort to do away with unnecessary square metres. The aim was to save money, and have less area to heat and clean. Overall, we have 112m² of living space. That’s more**

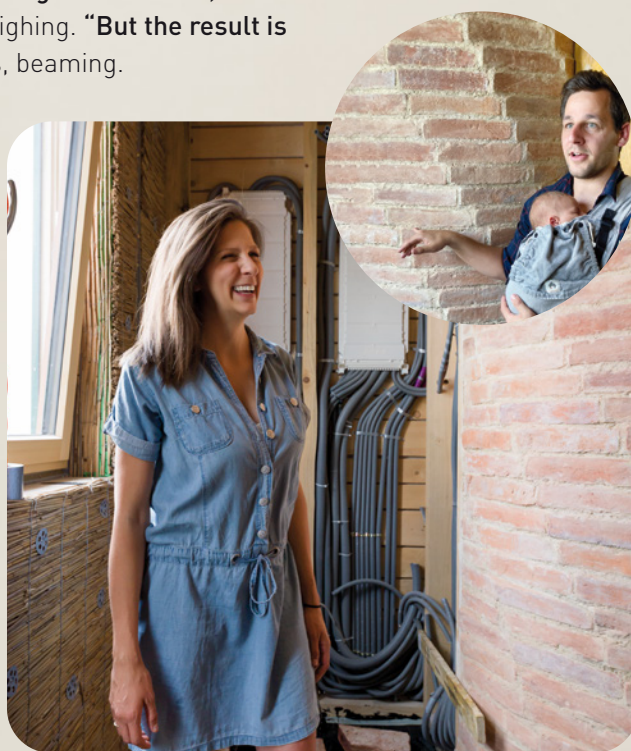
than enough. If this were a flat, you’d say it was generous!”

The walls are surprisingly thick, at around 45 centimetres. “That makes for good insulation. In fact, a heat pump wouldn’t be worth the money, as our heating needs are so low. If we weren’t thinking environmentally, a simple electric heater would even be enough. However, in combination with the cooling function, it’s possible to make double use of the heat pump”, Victoria explains. **“Cooling is doubly cool!.”**

Incidentally, what do the neighbours have to say about their unusual building style? **“They really like our house”,** Victoria says. **“Once, on a windy day, a bit of straw blew over into our neighbours’ garden. They didn’t mind, though! They just said ‘Oh well, it doesn’t matter. It’s only straw. At least it helps fertilise the roses! Because we use natural materials, our building site is less of a nuisance for our neighbours.”**

The young family plans to complete the house in 1 ½ years. **“We’re not in a hurry, and want to do a lot ourselves. It was a big step deciding to build in a sustainable way. But we knew that we just had to do it. Just as we need to think more carefully about whether we get on a plane or use fabric nappies for our children. It’s simply not in keeping with the times to plonk down family homes made of plastic. Also, the cost is very similar to that of brick buildings. There’s therefore no need to worry about that aspect, either.**

We don’t earn any more than other normal couples, with a young people’s building budget. You just need to know that this is the approach you want to take, and then it won’t be much more expensive. And in retrospect, we were even quite lucky with our decision. Because of the delivery bottlenecks, other friends who are only now building houses are having difficulty getting XPS polystyrene insulating panels and bricks, and if they are available, then at much higher prices than before. All we did was take our trailer to Podersdorf on Lake Neusiedl and collect all the reeds that we needed. They’re not in short supply.”



MARTIN RÜHRN- SCHOPF

GROWTH IS A GREAT PRINCIPLE!

Martin Rührnschopf, a visionary architect with a good understanding of the power of the sun, sits at his oval studio table, and scratches his lower arm. “Yesterday, I was camping by the Danube. I love that. The river and the waves. The starry sky,” he beams. It’s a wonderful start to a summer interview.

On the introductory page of his website, he writes: “Every building has a body and soul, it breathes and lives.” And it’s true. When it comes to living spaces, the fundamental purpose is always to touch people’s souls. But how do you breathe life into a building? What makes it breathe? Or, put another way:

Is architecture an act of creation?

Well, that might sound a bit overblown. But in fact, it’s true. That’s what’s so wonderful about architecture. The uplifting feeling when you see that you’ve breathed life into a building. Something grows together. Something opens up and is filled with life. It’s best described as “growth”. Growth is a great principle. I already realised this early on as being an essential driver in my life. Even at five



years old, I already knew that I wanted to plan and build houses. Like every kid, I built my first models from Lego. Soon afterwards, I built my first real houses in my grandmother’s garden. They were made from wood and brick. They were treehouses. It was exciting.

Is wood your favourite material?

It depends very much on the circumstances. I’d say, my preferred material is sufficient, is suitable, is right for the people, the place and the purpose it has in the building. Sometimes, it’s simply necessary to build with wood. I’d design a house on the edge of a forest or a small garden dacha from wood. Or to add on to an existing building? Sometimes, wood is also the right material there, too. Prefabricated, fast, light, environmentally friendly. Often, bricks are also the right material to use. Or loam. Of course, I also work a lot with straw and other natural insulating materials. The effect they have is unlike any other.

How do you go about planning your buildings?

My personal method is “simultaneous planning”. Everything is created at the same time. Together. In real time. I don’t

Models like these are created together with the customer, through simultaneous planning!



just create the plans in my office, but together with the clients, sometimes on site. The right solution is developed in a joyful and playful way. You get immediate feedback and can react to feelings and ideas. I don't plan for myself, but for my client. It has to be understood and accepted, and then the plan is absolutely the right one. The Variotherm headquarters were also planned with this integrative and efficient method.

How do you know when a building is a success?

When it's loved. By the people who work and live there. I know when a project is a success when the people who live in the building are visibly delighted that everything has turned out so well. Because they like to invite guests into their home. Because their family grows into the house. However, objectively, you could say that a good building is valid, timeless and flexible. It's balanced, pleasant and offers free spaces, is warm in winter and cool in summer, enables change and growth in every respect.

How do you as an architect work with change?

I've experienced so many new trends and cycles in the building industry. The first house that I planned and built was for my parents. At that time, I was 14. It was the 1970s, and there was inflation. We quickly took the car to the place that sold building materials and bought a few sacks of cement. The next day, they cost 30% more. The same is true again today. And it will take a long time before balance is restored. However, I also see an opportunity in this situation. I mean, that people will begin to realise that energy is a valuable resource. Now, a lot of people are thinking of buying a wood-burning stove, or a heat pump. They are more open to investing in a photovoltaic system. For many years, that wasn't a matter of course.

What role does the sun play in your designs?

For me, the sun is the most essential element. It's the centre of all my ideas. The sun isn't just physically important as a source of energy. It also provides life energy and is hugely important for physical and psychological wellbeing. In addition to the deliberate lightening, a photovoltaic or thermal solar system can be found on almost every building I design. Currently, I'm part of a team of people revitalize a set of old farm buildings. These types of houses often have a huge amount of storage mass thanks to their thick walls. The energy from the sun that we absorb here in the summer can't be directly used, however. A buffer storage system with 70 to 90 degrees doesn't really help. The question is therefore: how can we transfer this excess heat to the cold months of the year? The answer is to use thermosolar building component activation.

What is that?

The term refers to thermal solar collectors. In general, they're simply feed the pipe conduits, which are laid in the foundation or base slab of the building. They are used to heat the earth below the house very slowly via the storage mass. This makes the house comfortably warm in the winter, yet cool during the summer. This is such a simply building technique. You don't need a lot of regulation, and no complicated pumps or other equipment. It's a very smart, simple and effective technology. The sun covers 76% of the energy needed to heat the house and water throughout the year. It really works! Another technology that we've increasingly been using in recent years is heating and cooling surfaces. They offer a double benefit, for example in roof pitches, walls or ceilings. It's fantastic!



In his study, there's a 200kg old steeple top, which used to adorn a church spire. The architect Martin Rührnschopf discovered it at a parish flea market.

Shouldn't all architects include these ideas in their plans?

Well, there are simply a wide range of different approaches to architecture. Mine has always been very holistic. I try to harmonise all components with each other: the people who use the building, the surrounding buildings, the design and spatial impact, the aesthetics, and the ecology of the materials. I always create my energy concept in a very early phase. That's hugely important. After all, these components all have to be right, so that a building is created that really works – and which has a body and soul.

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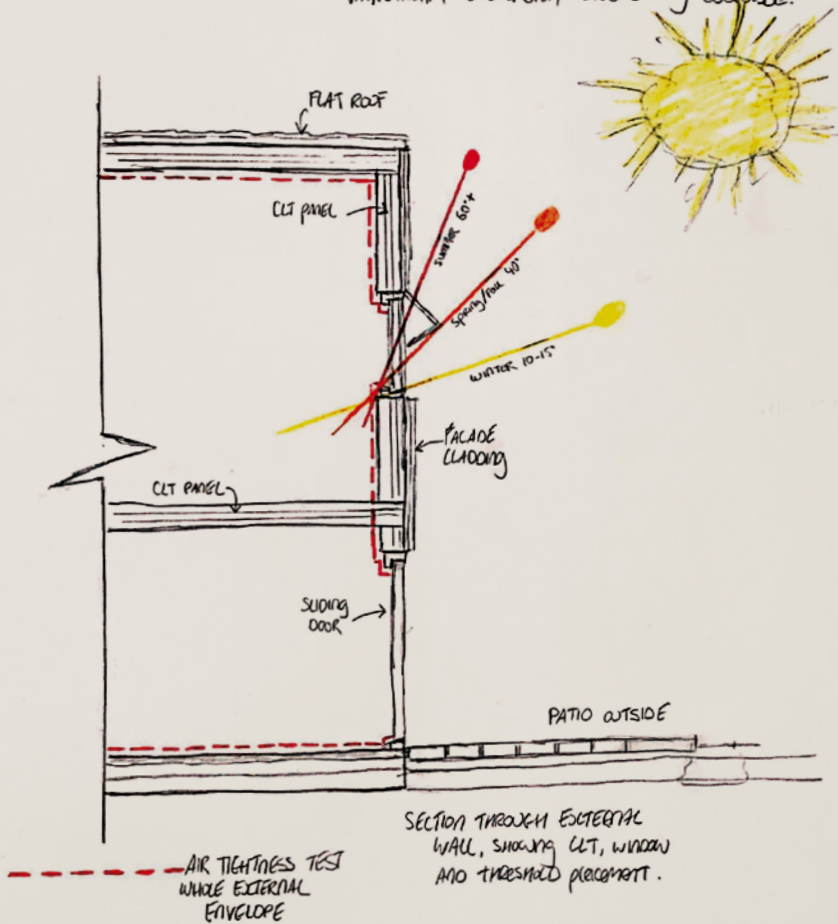
A RISING STAR



Peter Sullivan, Laura O'Toole, David Knight, Alexander Watzek

It's a well-known fact that Variotherm has a presence on the Irish market, and that it enjoys a high level of popularity there. However, even we were surprised that news of the expansion of our company headquarters even reached Dublin – where we were included in a university study!

VARIOTHERM EXTENSION: CASE STUDY SKETCHES



You can find the complete study here as a pdf. It is worth taking a look at it. Just scan the QR code with your cell phone!



Laura O'Toole studied architectural technology under direction of university lecturer David Knight at the Technical University Dublin. As part of her study programme, she attended an interesting lecture by our Variotherm partner, Peter Sullivan. "I was so fascinated by this sustainable building concept that I decided to make the new Variotherm headquarters the subject of my paper on highly efficient building technology, building performance and technical design!", she explained.

The subject of the report was to study the systems used in the building, to analyse them on the basis of the available research results and from this, to make a connection between the history of the building and the ongoing success of the company.

"The innovative power and sustainable nature of wooden buildings have inspired me for a long time. The environmental reasons given by Variotherm for choosing wood for their building extension motivated me to focus on this area of research for my diploma thesis."

The young researcher was nominated for the Rising Star Award in Architectural Technology 2021 for her work.

In her study, she analysed the Variotherm building shell, which is made of wood / CLT (Cross Laminated Timber), the systems used for heating and cooling, energy production with the building's own PV system, the cleverly designed lighting and ventilation systems, and the use of grey water in order to save on resources.

