

Text **Terri Peters**  
Photos **Studio Beat Karrer**

# BEAT KARRER

## RESEARCHES MATERIALS TO SOLVE DESIGN PROBLEMS



Zurich-based designer Beat Karrer aims to break the rules of furniture and lighting design. 'I say kill your idols – well, mentally at least. As a designer you have to overcome the strong force of what has already been done.' Known for his innovative designs for flexible furniture, adaptive lighting and research into biopolymers and other 'smart' materials, Karrer is making his own rules, reclaiming minimalism as a rebellious approach.

A self-confessed 'wild child' in his youth, Karrer had an atypical education for a designer. While his current peers were at design school, Karrer was kicked out of college. He much preferred

punk rock, tattoos and his squat in London to any sort of formal education. In his twenties, after an inspiring year-and-a-half-long motorcycle tour of South America, he returned to Switzerland determined to learn how to make things. He took a vocational training course in carpentry and began creating bespoke furniture for himself and his friends. He launched his own furniture collection in 1998. Almost immediately a prestigious design company, Hidden, selected one of his pieces for production – Plobb, an adjustable aluminium-and-rubber dustbin – which was marketed in 2000. Despite the manufacturer's

later bankruptcy, the collaboration was an important step for Karrer. 'I was really encouraged by their feedback. They had a lot of big-shot designers like Ron Arad, Richard Hutten and others – and I thought maybe I should continue doing this.' In 1999 Boffi bought his lightweight, frameless Bantam Table and his hinged, extendable Rotor Shelf System. Karrer began to see himself as a designer, and he has not looked back. 'Twelve years ago I was a craftsman with design aspirations, and now I'm a designer with a craftsman's approach.'

Since those early days, he has worked with clients like



CUTTING MATERIAL SAMPLES THAT WILL BE SUBJECTED TO A BREAK TEST.

## 'For me, technology and innovation always come above styling'

– Beat Karrer –

FROM LEFT TO RIGHT: ANNINA GAEHWILER, BEAT KARRER, GABRIELA CHICHERIO.

Bulova, Greenpeace, Swatch and Swarovski, among others, and collaborated with manufacturing and materials companies such as Alcan (aluminium), Corian (solid surface), Blizzard Composite (polycarbonates) and Sefar (fabrics). His portfolio includes more than 20 furniture, lighting and installation projects, including Do It Yourself (2006), a flat-pack, laser-cut shelf fabricated from a single sheet of material; Bright Stripes (2008), an energy-efficient LED system that emits soft, focused light; Flying Carpet (2009), a 40-m-long textile roof installation for an outdoor theatre festival in Germany; and Beluga (2007), an asymmetric



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PREPARING A MOULD FOR A CASTING TEST.

FLORIAN HUBER WORKING ON THE MAKINGS OF A NEW MATERIAL.



white-Corian champagne bucket. 'It's really inspiring to jump among disciplines, materials and scales. Regardless, the design must be smart – and beautiful.'

His design studio, with three employees, is in the heart of the old red-light-turned-trendy district of Zurich West. He shares an old pharmaceutical packing plant with an architect and a photographer. The whitewashed space, with 4.5-m-high ceilings and enormous windows, contains a small scientific-looking laboratory area where he conducts materials research, as well as a model-making workshop with soldering machines, lathes, woodworking materials and lots of

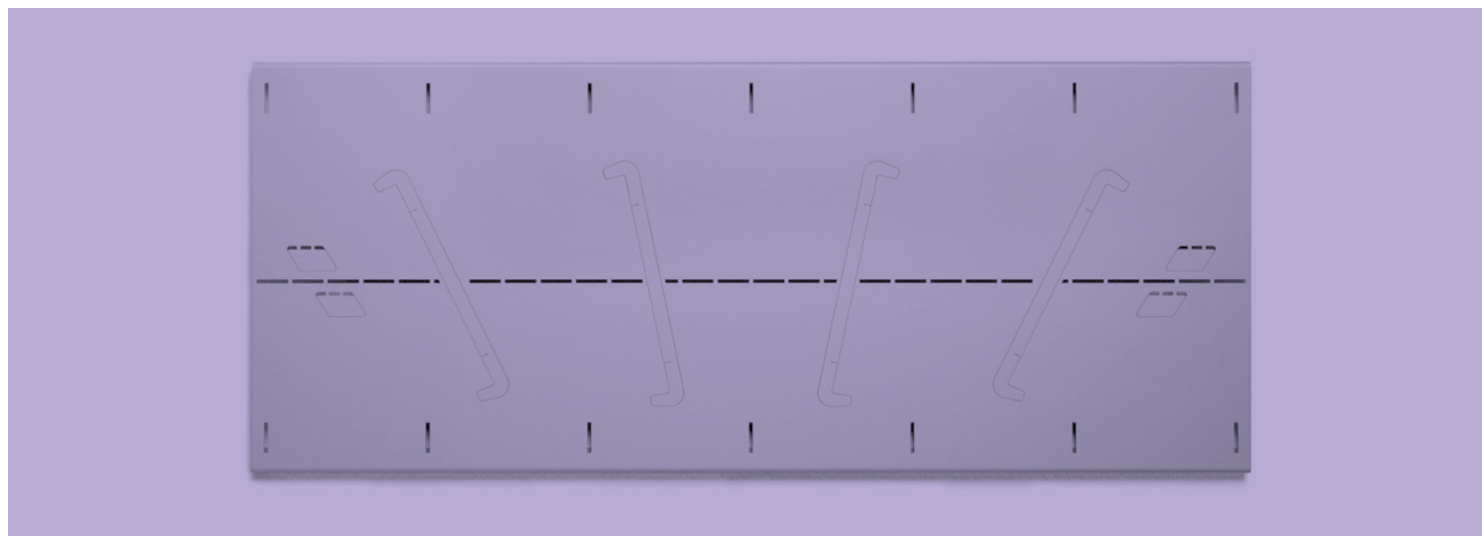
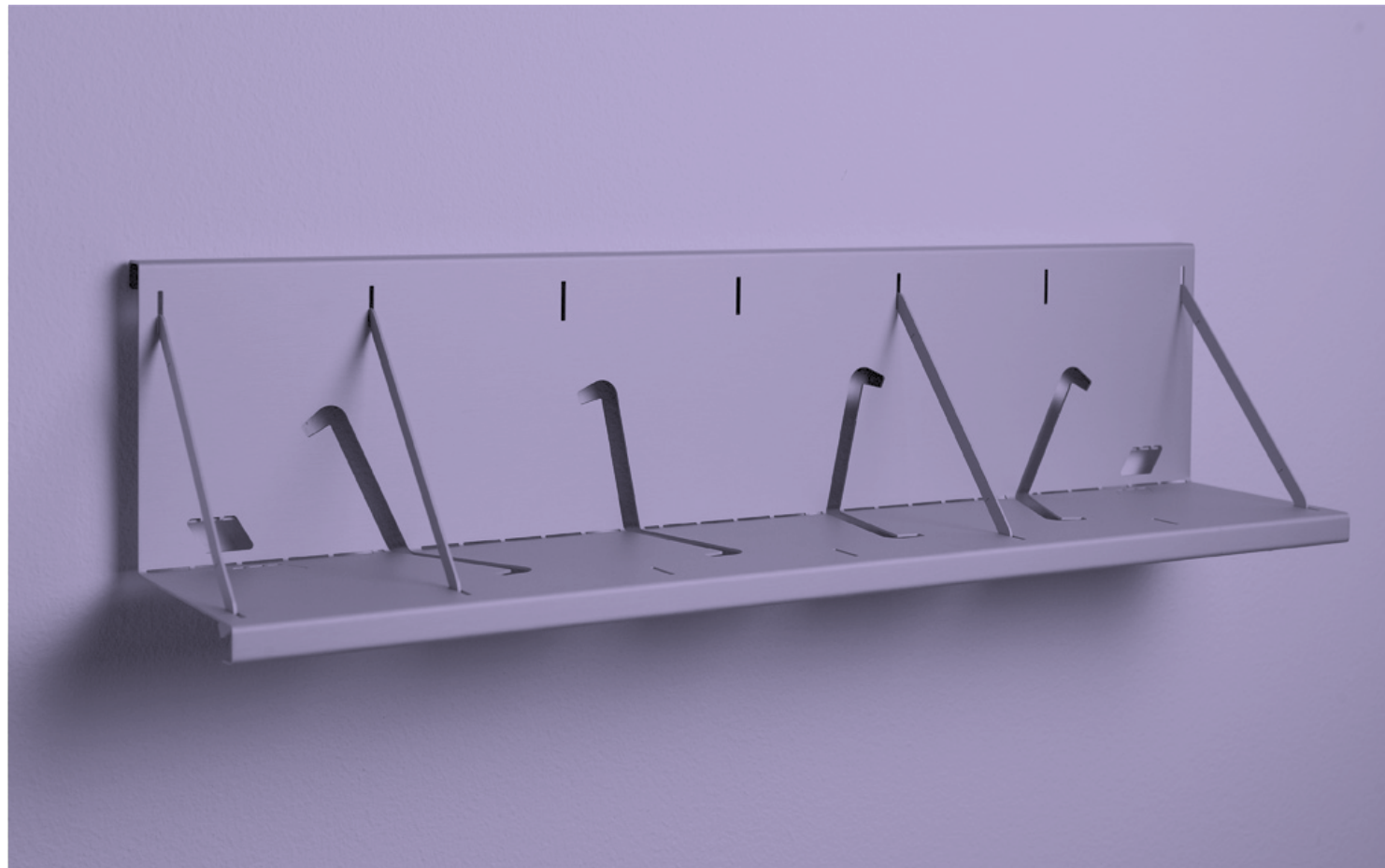
room for physical models and prototyping. He remains a maker and cites practicality as a virtue. He likes his studio because it is close to home and Switzerland because of its central European location. He prefers smart design to empty form-making. 'For me, technology and innovation always come above styling.'

Karrer solves design problems through research into materials and fabrication processes, stubbornly refusing to stick to what has already been done. 'For example, I was designing a table with Corian, which is a beautiful, smooth, solid material that is also heavy, brittle and expensive.' The challenge

was to make a tabletop entirely of Corian. 'I wondered how to approach the design of a table for which I wanted to use only 10 per cent of the material.' Karrer began experimenting with ways to reduce the amount required and ways to make it easy to transport and as compact as possible for efficient storage. 'I looked at the thermoform moulding process used in the plastics industry to see how we could glue multiple thin sheets of Corian together to build up a strong but layered table,' he explains. Many experiments later, the result was the Groove table (2006), which takes its name from the ridge that gives the layered

surface structural stability. The table legs can be folded for ease of transport and storage. 'I know this is not an invention, but it is about being open and curious and looking at ways to do things differently,' he says of the process of borrowing techniques from other material-making processes. 'When people tell me things won't work – you simply cannot do that! – I try to look at ways to prove it *can* be done. Basically, I think the answer is always: yes, it can be done. But yes is just a starting point – and maybe not *always* the right answer.'

Nightshade (2007), an outdoor lighting system, was already in »



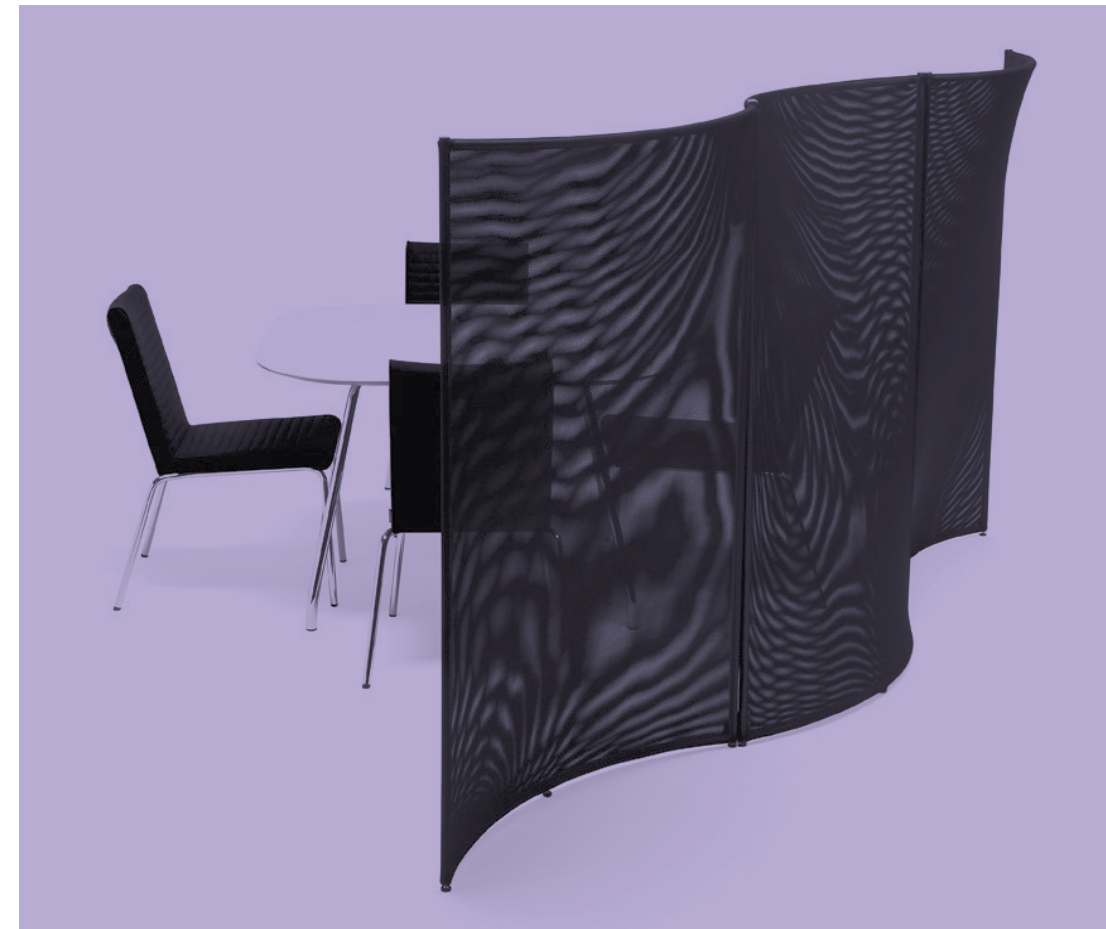
production when Swiss company Burri contacted Karrer. Burri asked Karrer to rethink the design, to figure out how to focus the light and to reduce light pollution – all within a small budget. ‘Working with prototypes, we cut out and bent small pieces in an effort to get the shape to work.’ This meant working with engineers to ‘measure’ the light and finding a form that would focus the light in outdoor spaces, ultimately provid-

ing pleasant illumination without producing glare. ‘The result was a shape geared almost totally to the performance of the light – and it ended up being almost three times cheaper in production.’ Research, including manipulating and experimenting with materials, is the basis of Karrer’s methodology. ‘As a designer, I do research because it forces me to be curious and to follow my nose.’ Spinnaker (2007) is another

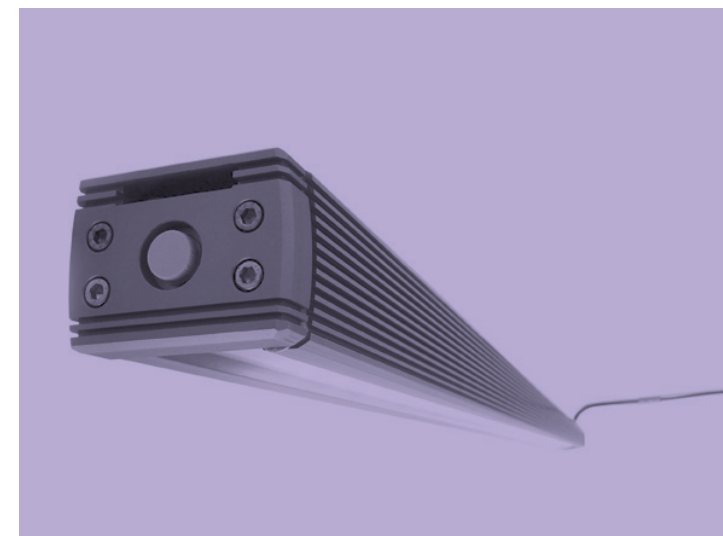
project that involved researching and testing different materials and formal strategies. The client, Of-fecct, was interested in an acoustic room divider that could be used to configure various kinds of spaces and atmospheres within an open-plan layout. Karrer sourced a 3D mesh material – a thin polyester composite – with good acoustic properties. Spinnaker is a freestanding, metal-framed room divider with a fluid, undulating

**DO IT YOURSELF (2006).**  
PHOTOS LUCA ZANIER

**BRIGHT STRIPES (2008).**



**SPINNAKER (2007).**  
PHOTO PETER FOTOGRAF



**DUO (2007).**  
PHOTO ALAIN BUCHER

shape formed by panels of sound-absorbing textile. He built his design concept on the behaviour of people occupying the various compartmentalized spaces. ‘If you’re sitting, you are in an intimate, separate space. When you stand up, you experience the room. I think of it as micro-architecture.’

At the moment, Karrer is working on a top-secret 3D printing project, collaborating with fabricators and materials

**‘It’s important to treat employees right; you want their know-how to stay in your company’**

— Beat Karrer —

companies in the hope of radically transforming his activities, in terms of techniques and materials. ‘I love bits and bytes, but there’s a big gap between how something looks and how it’s made,’ he says. ‘I think anything that can be thought of can be a reality, sooner or later.’ He is frustrated by the lack of creativity in the design industry, especially when it comes to innovation. ‘Why do things always need to look the same: a »

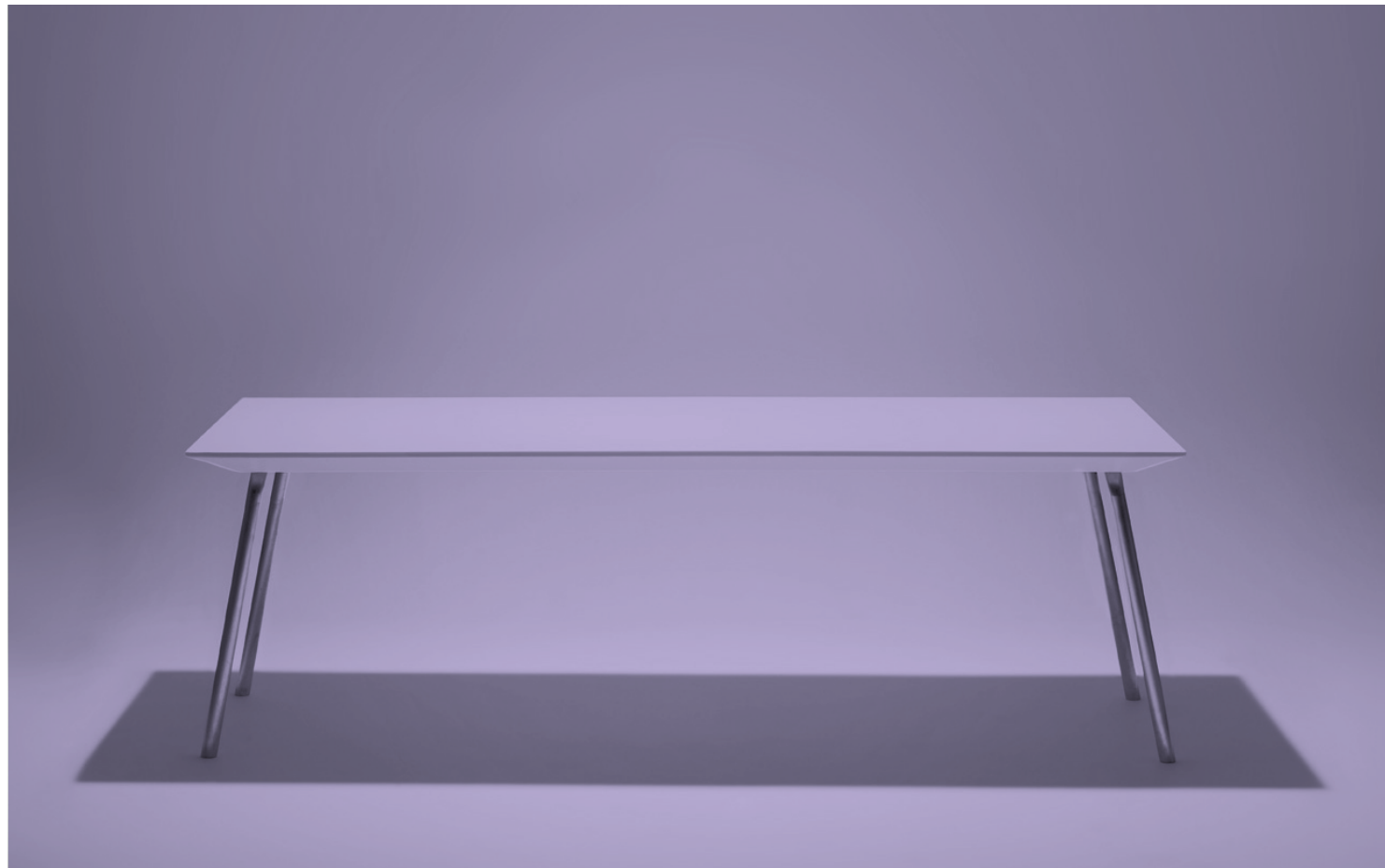


PHOTO LUCA ZANIER



THE GROOVE IN THE BOTTOM LAYER OF THE TABLE PROVIDES STRUCTURAL

wood top, some steel tubing, and you have a table. It can be so old-fashioned. People are changing, society is changing, manufacturing is changing – as designers, we need to look more at what can be done and what should be done.’ In recent years, Karrer has worked on the development of new materials with various labs and companies that have an interest in commercializing their inventions. ‘They are just stacking their

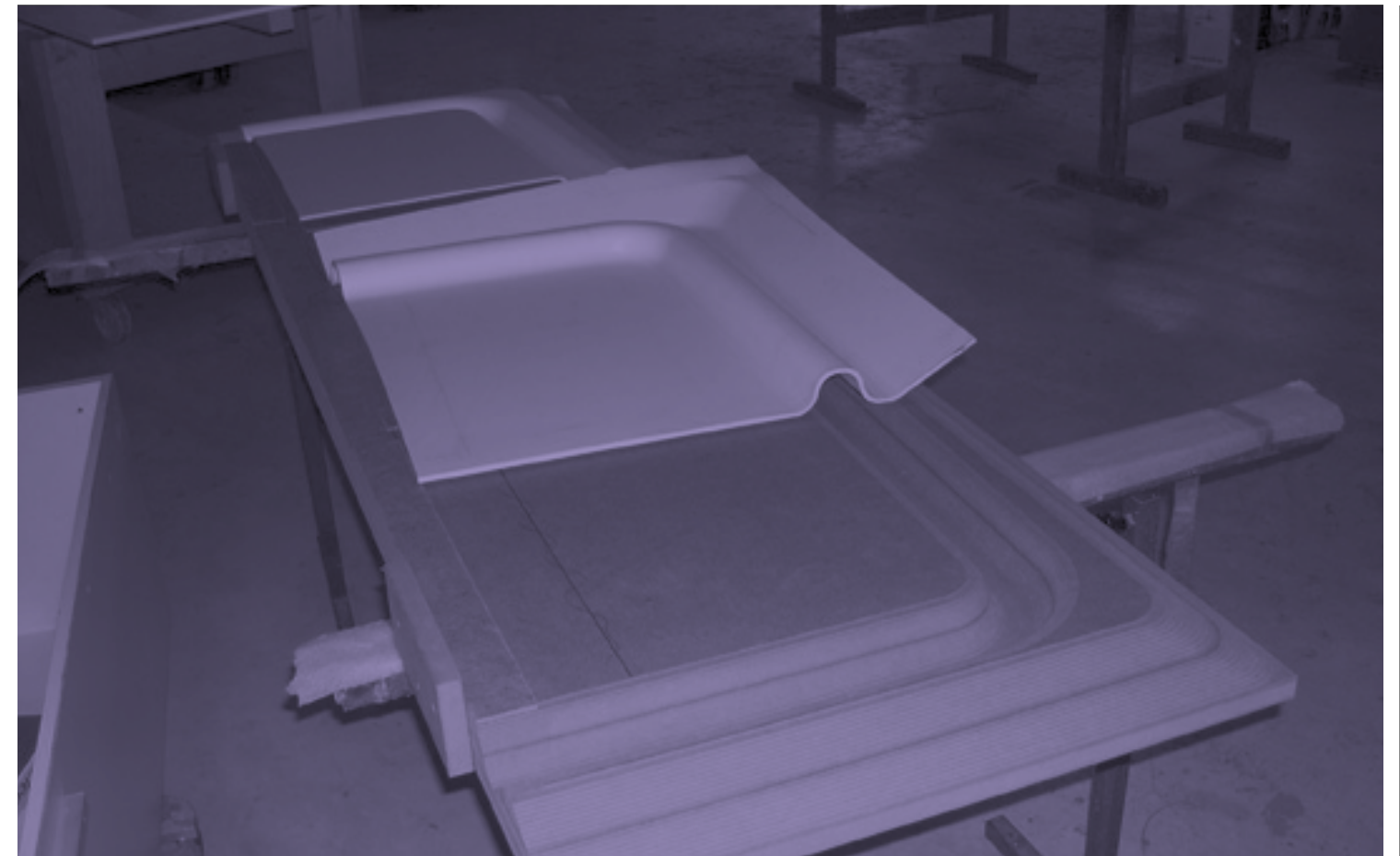
ideas on shelves and waiting for an opportunity to do something with them. I look at this process – making use of ideas that exist but have never been used – as a kind of creative sustainability.’ ‘Sustainability’ is a buzz word that’s been so overused in the design sector that it seems to mean everything and nothing. ‘I’m referring to both the process of design and the use of a product,’ he explains. ‘For example, it’s

important to treat employees right – you want their know-how to stay within your company – and to generate a good atmosphere for design and inspiration. Whether or not a product is degradable is not first on my list of priorities. What about how that product is used?’ His most high-profile project, Duo (2007), is a bookcase with flexible dimensions that can be adapted to fit virtually any space and provide a customized look.

### Groove

2006

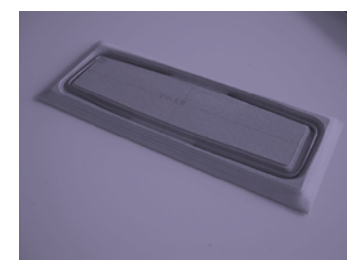
Groove has a tabletop made entirely of Corian. By taking advantage of the thermoform properties of the material, Studio Beat Karrer minimized the amount of material needed, maximized the inherent strength of Corian and avoided the need for additional structural supports.



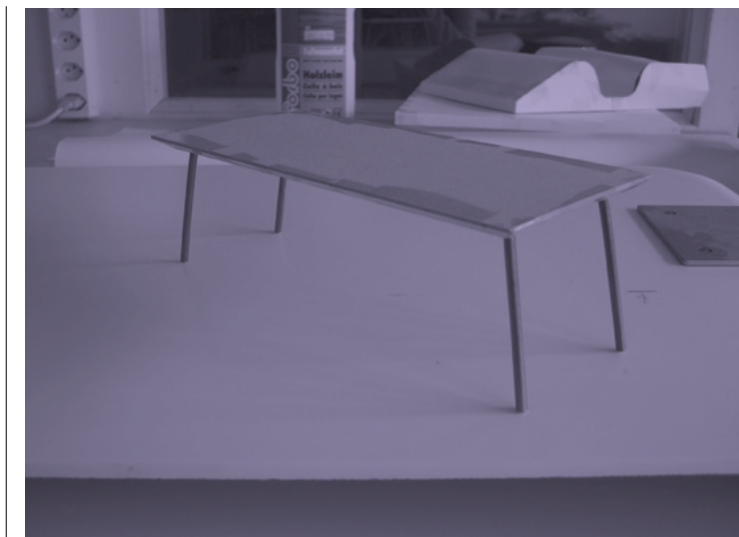
## ‘Making use of ideas that exist but have never been used is a kind of creative sustainability’

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GLUING TWO HALVES OF A TABLE TOGETHER.



FOLDING OF THE TABLE LEGS.



PROTOTYPE.



MAKING THE ‘GROOVE’.

essentials, reducing and editing the concept until it was as minimal as possible ‘There is just so much crap out there; before we ask if we can do something, we need to ask why we want to do it. Just because technology or manufacturing lets designers do something doesn’t mean we should take the bait. And there lies our biggest challenge.’ «