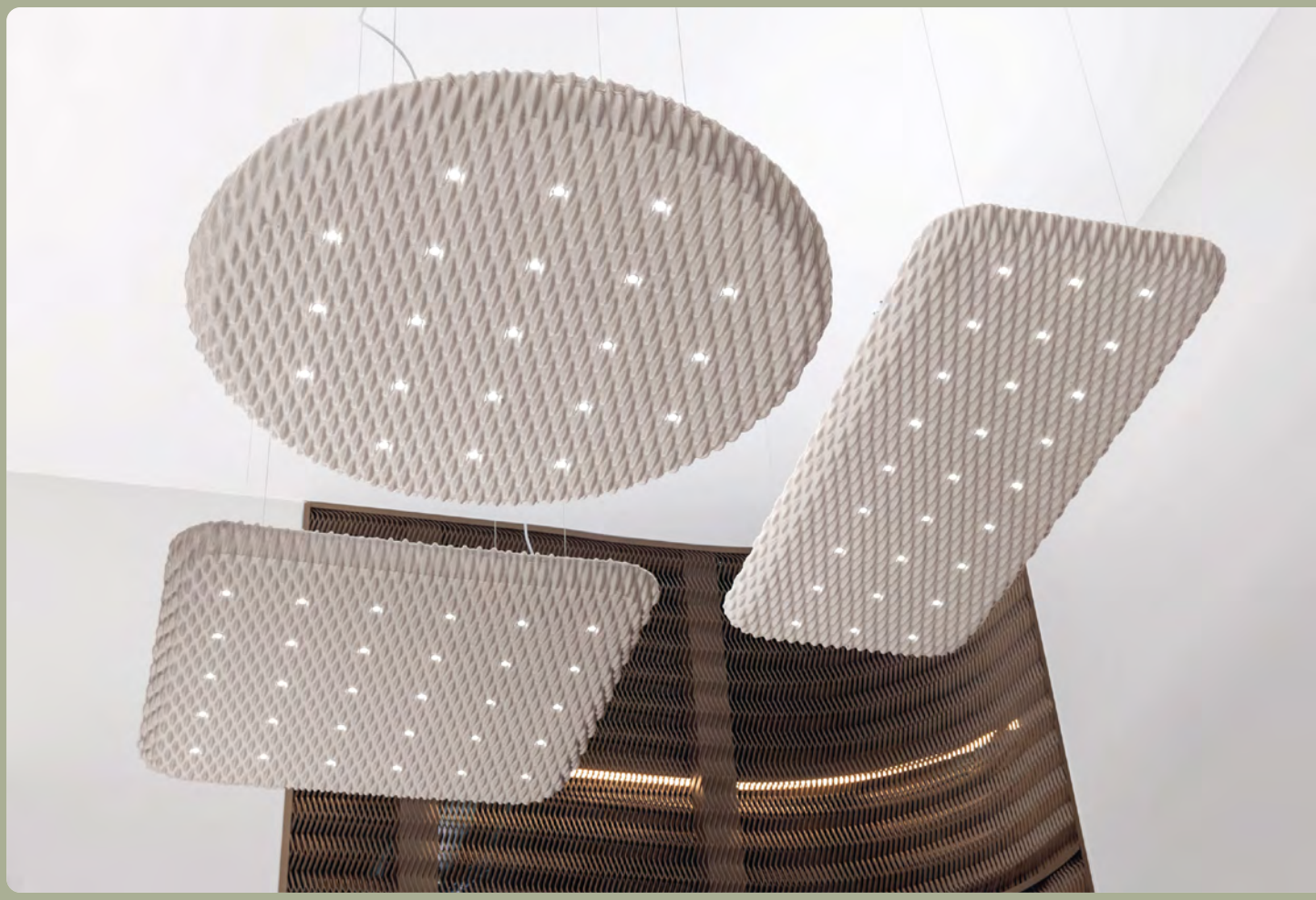
lightnet

Highlighting
Architecture



Serenity – harmony of light and texture

Our new Serenity acoustic luminaire, designed in collaboration with textile designer Aleksandra Gaca and textile manufacturer Casalis, transforms rooms into places of elegance and tranquillity.

Our new acoustic luminaire Serenity helps to create a calm and relaxing environment and, with its aesthetic design of gentle shapes and colours, promotes a sense of serenity. Our Serenity luminaire is the result of a careful creative process that unites the worlds of light and textiles.

In collaboration with renowned textile designer Aleksandra Gaca and Francis Vercaemst, founder of the Casalis textile manufacturer, a collection was created that combines architectural inspiration, state-of-the-art technology and acoustic functionality to produce a luminaire that transforms spaces into calm and harmonious environments. This brochure tells the story of Serenity – the design concept, the choice of materials and how the luminaire was brought to life.

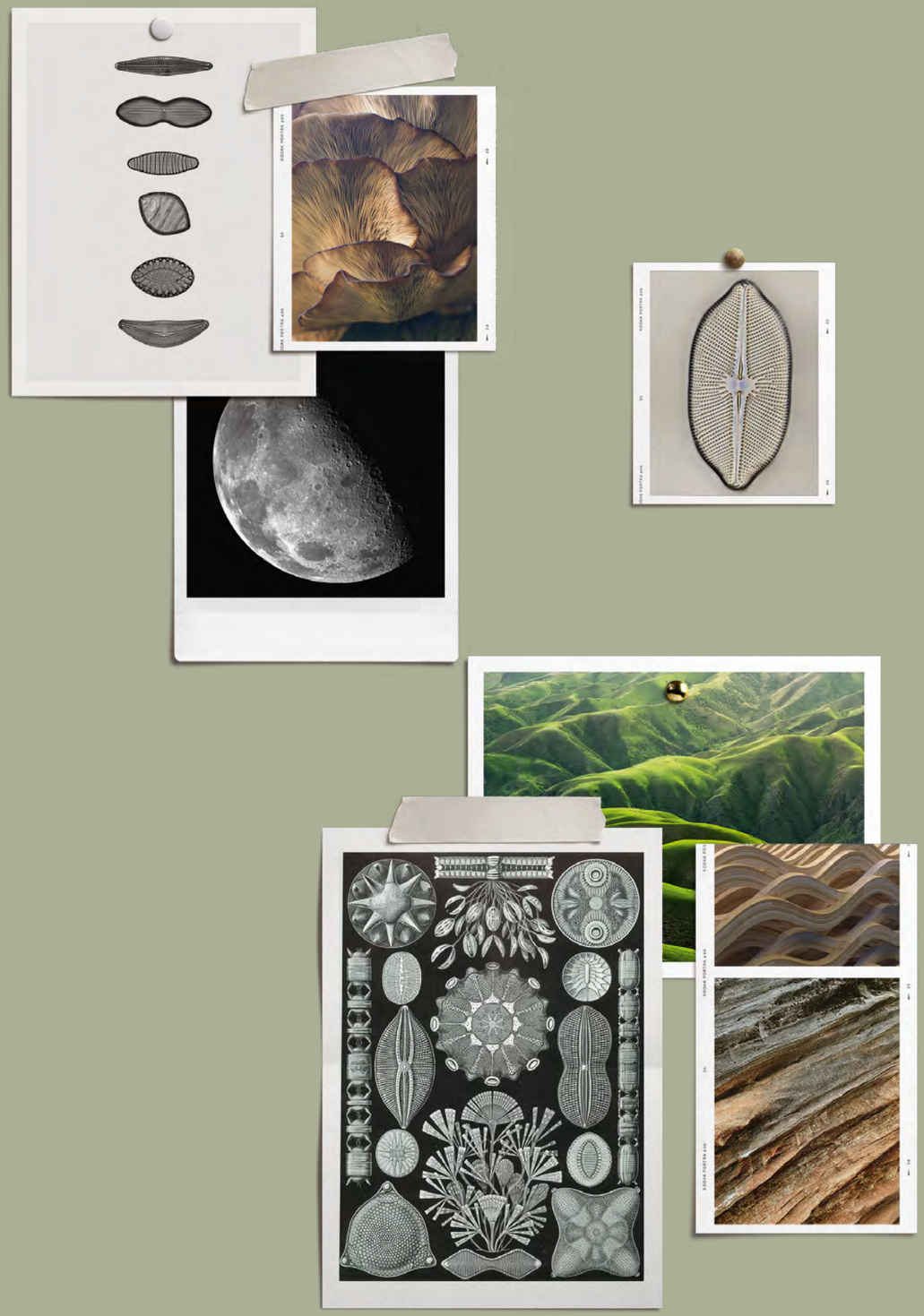
A journey in light and texture

↓ Serenity (Rectangular) G3/P3 | Suspended in Green Fabric

↑ Architect Magdalena and luminaire developer Konrad
from Lightnet designing Serenity

Inspiration from nature

The idea for the creation of Serenity developed over time and drew on deep and unexpected sources of inspiration. Architect Magdalena from Lightnet remembers making sketches and searching for shapes and textures that reflected the tranquility of nature. She explored everything from deep-water diatoms to tree structures, mushroom caps and even the porous surface of the moon. These natural forms gradually evolved into the soft, inviting and harmonious shapes that define Serenity today. Together with engineer Konrad from Lightnet, Magdalena began to explore the right shapes and perfect sizes for the new family of luminaires.



↑ The Serenity development team

‘For me, the questions that arose included: How do we integrate light into the Ondo material, and how can Serenity meet our high standards of lighting?’

Konrad

Interview Magdalena

‘In the end, we explored the porous surface of the moon. The inspirations we gathered fit together like a puzzle throughout the entire creative process.’

Magdalena

‘The idea of designing a luminaire develops gradually over time. It is a fascinating journey from the very beginning, asking ourselves what kind of acoustic luminaire we could design, to the final creation. I still remember our first sketches from 2021 and our search for shapes and materials. It‘s amazing how close the drawings came to the final product, and yet it was a long way to go. We started by exploring nature. We dove into a deep lake and found some fascinating diatom shapes. Then we were back in the forest, exploring the structure of trees, the shapes of the undergrowth and mushroom caps. And in the end, we explored the porous surface of the moon. The inspirations we gathered fit together like a puzzle throughout the entire creative process.

Finally, a trade fair in Utrecht set the pace for our work. We found a material from Casalis, designed by Aleksandra Gaca. We received a wide variety of samples from Casalis, both in terms of colours and textures. Our attention was particularly drawn to the Ondo material, which, with its soft shapes, was the answer to our search.

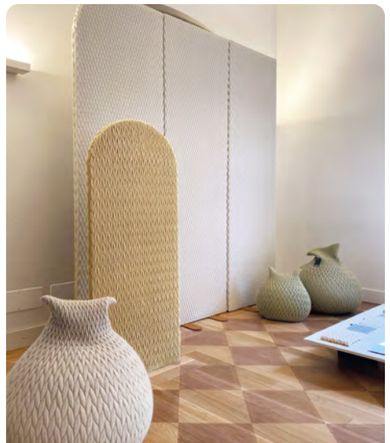
Together with Konrad, we began to find the right shapes and matching sizes for a new family of luminaires. Konrad focused on working with light, the possibilities of integrating light into the material, light efficiency, the internal construction and the suspension options. I focused on proportions, sizes, the shape of the rim and, of course, the selection of colours for the collection that would match our new coated finishes. We did numerous tests with shapes and light integration until we were satisfied with the result and ready to present three simple shapes – a Serenity circle, a Serenity square and a Serenity rectangle.’

Photo: Studio Matusiak & Eddy Wenting Photography

Interweaving light and texture

Aleksandra Gaca, a pioneer in 3D textiles. Gaca's fabrics offer more than just aesthetic appeal – they are designed to engage the senses, from tactile to acoustic properties. Her innovative Ondo material, which architect Magdalena von Lightnet discovered at a trade show in Utrecht, became the cornerstone of Serenity. Gaca's focus on textures that interact with light added a new dimension to the luminaire, creating a multi-sensory experience that not only enhances spaces but also evokes emotions.

↓ The Ondo fabric developed by Aleksandra Gaca in the form of home accessories.



Interview
Aleksandra Gaca

'I think in threads, constructions and surfaces; I literally build with threads. My work combines the rich heritage of ancient craftsmanship with cutting-edge technology.'

Aleksandra Gaca

Lightnet: Could you start by telling us a little about yourself and your work?
Aleksandra: I have been working professionally in textiles for over 25 years, designing and developing three-dimensional textiles that lie at the intersection of art, design and architecture. My focus is on innovation, application and textile architecture. My fabrics are used indoors as acoustic panels, integrated wall coverings, but also in home accessories such as cushions, plaids and rugs.

My clients also work with me on projects where 3D textile knowledge and expertise are crucial. I often say that I think in threads, constructions and surfaces; I literally build with threads. At the heart of my work is combining the rich heritage of ancient craftsmanship with cutting-edge technology to create high-performance 3D woven fabrics – from my award-winning Architextiles collection to woven constructions on an architectural scale.

What inspired you in the development of your 3D textiles?
I draw inspiration from geometric and abstract forms in architecture, but also patterns in nature, and translate these into abstract designs. My focus is on developing textiles that, like nature, offer sensory experiences, from tactile to visual to auditory, that contribute to better living and working conditions. In my ongoing research into three-dimensional textiles, I consider textile constructions as tiny spaces and explore ways of increasing their size to achieve an architectural level. One that could potentially even include the cladding of a building's exterior. I find the architectural theories around the 'cladding' of a building, what architects refer to as the 'skin', very interesting and inspiring.

What was your first impression of working with Lightnet?
I was immediately impressed by the refined elegance of the lighting objects. The integration of textiles and light was particularly impressive. It created a harmony that enhanced both form and function. The considered use of texture and lighting not only improved the aesthetics, but also gave the overall designs a welcoming tactile quality.

'In my ongoing research on three-dimensional textiles, I consider textile constructions as tiny spaces and explore ways to increase their size to achieve an architectural level.'

Aleksandra Gaca

How do you conceptualise your 3D textiles?
When I start a new project, I like to begin by sketching and designing patterns either on paper or directly on the computer. Depending on the end application, I select suitable yarns and experiment with different weaves and constructions to create new forms. I usually start this process on a 24-heddle dobby loom in my studio to test the weaves. Then I switch to industrial looms, mainly jacquard looms, which offer more possibilities when creating patterns. I test different weaves and constructions with my designed patterns to create the final fabrics.

'My objective is always to create high-performance textiles that offer a multisensory experience, that fully engage the senses and evoke emotions through the tactile, visual and auditory properties of my designs.'

Aleksandra Gaca

How did your collaboration with Lightnet come about?
Lightnet approached the Belgian textile brand Casalis, one of my collaborators, to explore the integration of my three-dimensional woven fabrics into the Serenity Collection. I designed a collection of 3D woven acoustic and seating poufs with Casalis and admire their vision and commitment to transforming traditional craftsmanship into exceptional products.

What makes Lightnet an ideal partner for you to integrate your textile work into their products?
Lightnet's willingness to explore a cross-disciplinary approach to creating lighting objects opens up new and exciting avenues for innovative products. This future-oriented combination of lighting, haptics, acoustics and texture creates new, unique experiences for end users. It pushes the boundaries of design, a quality that is very close to my heart.

What do you consider to be the most important aspect of designing textiles, especially when it comes to balancing both aesthetic and functional qualities?
At the core of my design approach is a deeply human concern – I am genuinely concerned with providing end users with experiences that resonate on a profound level. I want my textiles to contribute to well-being. I want to fully engage the senses to evoke emotions through the tactile, visual and acoustic properties of my designs. Ultimately, my mission is to create healthy, inspiring environments that enrich the quality of our lives in both private and public spaces. I firmly believe that textiles play an important role in our lives. They can have a positive effect on our emotions and provide a sense of security and comfort. They are soft, warm and even absorb noise. And when combined with visual aesthetics, they allow us to create a pleasant environment in which we enjoy spending time.

Sustainability is a core value at Lightnet. How do you integrate sustainable principles into your textile designs?
My textiles are designed to last. By focusing on high-performance materials, these textiles maintain their quality and functionality over longer periods of time, reducing the need for frequent replacement. This not only conserves resources but also fosters a deeper connection between the user and the product.

‘At the core of my design approach is something deeply human – a sincere effort to provide users with experiences that speak to them on a deep level.’

Aleksandra Gaca

What innovative techniques or materials are you exploring to ensure both visual appeal and environmental responsibility in your textiles?
I specialise in 3D weaving, a textile innovation that I pioneered over 25 years ago and continue to refine, developing textiles that break new ground in weaving technique and applications. My goal is always to create high-performance textiles that offer a multisensory experience, fully engaging the senses and evoking emotion through the tactile, visual and aural properties of my designs. When designing for workspaces and public spaces, the fabrics must meet strict international safety standards, such as fire retardancy, which may limit their environmental friendliness. However, their extended lifespan compensates for this, as their durability reduces the need for frequent replacement and ultimately contributes to long-term sustainability.

How do you manage to give your textiles a sense of calm and harmony?
The aesthetic basis of my work is always contemporary and draws inspiration from nature and architecture. I am fascinated by natural structures, patterns and movements. I add rhythmic, colourful nuances to my minimalist geometric patterns rhythmic, colourful nuances that emphasise the flow of the fabric. When viewed from different perspectives, the textiles interact playfully with light and shadow, suggesting a dynamic sense of movement. Some colours subtly transition from one shade to another, while others provide contrast. This interplay brings the textiles to life and offers a surprising, multi-sensory experience that evokes harmony and brightens interiors.

How does interacting with light change or improve the way you perceive your textiles?
My fabrics are three-dimensional, so they naturally interact beautifully with light, creating a sense of movement as you change your perspective. This constant interplay of light and shadow changes the way you perceive the fabric. At certain angles of light, the textures come alive and gain depth, creating dynamic and exciting visual effects.

How do you see the future of textile design, particularly in terms of its integration with architecture and lighting?
Recognising textiles as one of the oldest building materials is really a fundamental element in my approach. In my world, textiles evolve from flat surfaces to three-dimensional constructions, from wall coverings to freestanding objects in space, and finally to fully immersive environments. My design ethos is driven by a strong belief in the potential of weaving technology. With properties such as lightness, breathability, acoustic properties, flexibility and more, textiles with three-dimensional structures are also the material of the future. I see weaving as a powerful tool that can be used to create innovative structures that offer new, sustainable solutions for interior design, lighting and architectural design. Textiles can become important architectural elements that enhance pleasant and healthy living environments, and it is crucial to explore new applications for them. In the future, they can replace environmentally harmful materials in architecture and pave the way for sustainable solutions.

‘This constant interplay of light and shadow changes the way the fabric is perceived. At certain angles of light, the textures come to life and gain depth, creating dynamic and exciting visual effects.’

Aleksandra Gaca

Like textiles, light is a sensual experience that can influence emotions. I have long been fascinated by the integration of light and woven textiles. You can play with light temperatures to create different moods. Over the last 25 years, I have created innovative products that play an essential role in our personal and professional lives. But innovation never stops. As the textile industry continues to evolve, I look forward to exploring new opportunities for textiles to contribute to sustainable, functional living and working spaces.

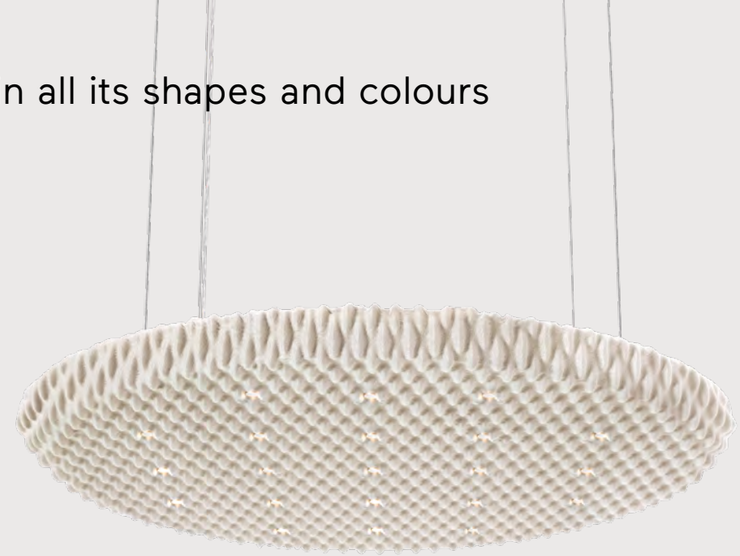
Are there any upcoming projects that you are looking forward to, be it in the field of textile art or in terms of new collaborations?
I am very much looking forward to pursuing further interdisciplinary projects. I want to focus on developing new materials with unique properties that can be used in a range of areas. I am constantly working to develop my fabrics and find new ways to solve emerging research questions and challenges. One area I am really interested in is exploring the potential of weaving technology to create innovative textile constructions that make our spaces more functional, healthy and enjoyable. And this is not limited to architecture – it also includes the automotive industry, new applications in the field of lighting design and personal accessories such as shoes and bags.

What do your textiles contribute to the ‘Serenity’ project and how should people experience them in this context?
The combination of three-dimensional textiles and lighting creates a unique perception and a multi-sensory experience that evokes a feeling of serenity. This integration offers people a positive experience that offers both aesthetic, tactile and acoustic surprises, while highlighting the interaction between textiles and light. The three-dimensional, minimalist patterns and textures interact naturally with light and shadow, suggesting movement when you change your perspective. When textiles are integrated into lighting objects, this effect is intensified, resulting in something truly innovative. I hope that people not only appreciate the visual beauty, but also develop an emotional connection to their surroundings.

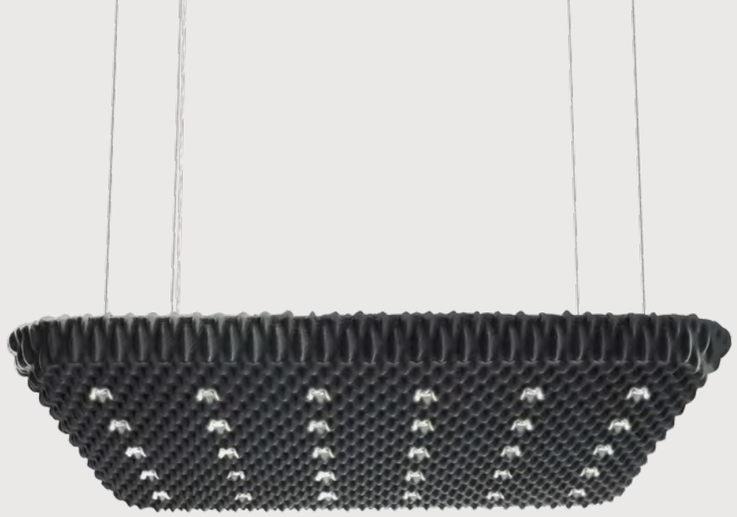
At the heart of the Serenity collection is a commitment to sustainability. Designed by Aleksandra Gaca, the textiles are designed to stand the test of time without sacrificing beauty. The high-performance materials selected for Serenity ensure that the luminaire retains its acoustic and visual properties for years to come, minimising the need for replacements. Since its foundation, Lightnet has followed a policy of producing only what is needed, paying careful attention to sustainable processes and materials at every step of production – 100% in-house manufacturing. Find out more at bit.ly/rethinklight

Designed to last

Serenity in all its shapes and colours



↑ Serenity (Round) G2/P2

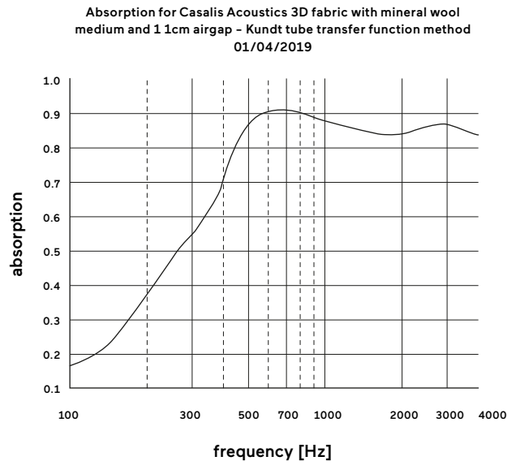


↑ Serenity (Square) G2/P2

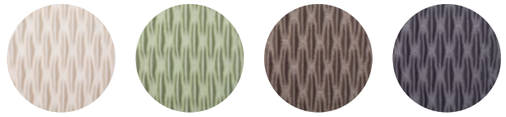
↓ Serenity (Rectangular) G2/P2

Serenity G1/P1 | Suspended

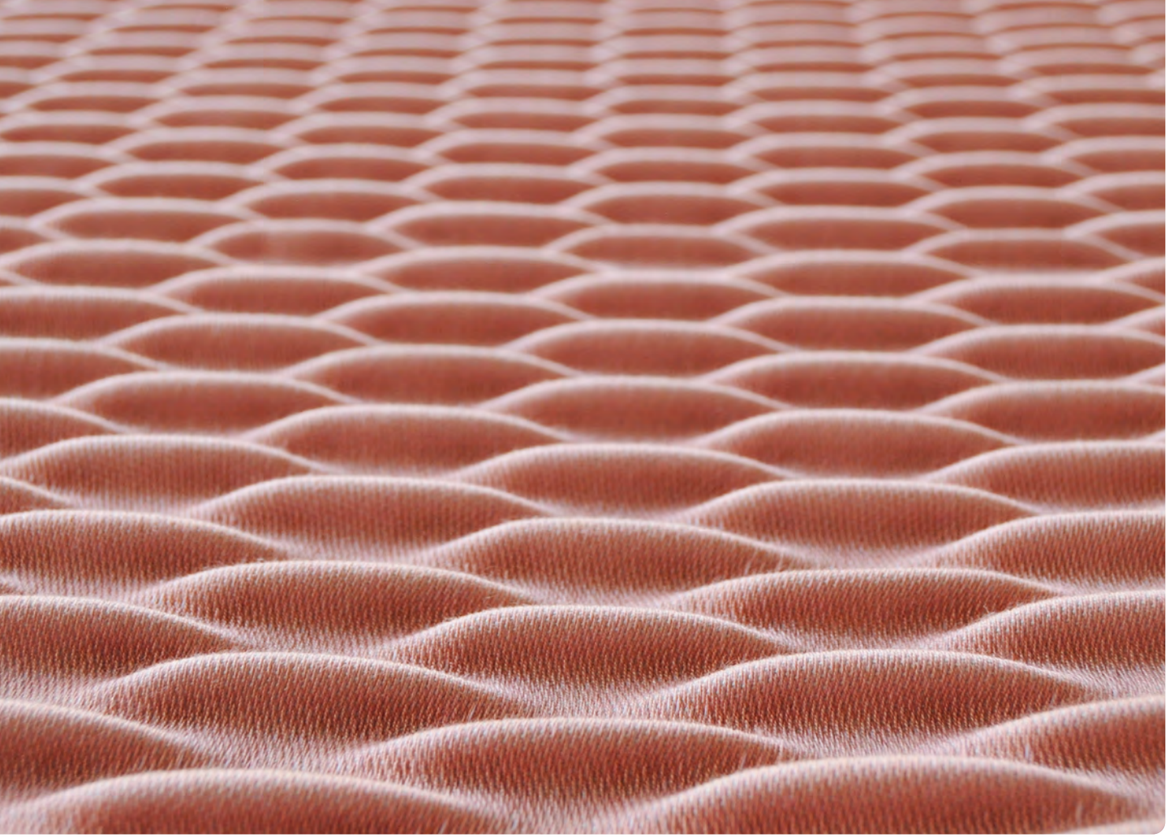
Fire retardancy: EN 13501-1: B-s2,d0
Class A acoustic rating - αw 0.90



LED acoustic pendant luminaire
Direct-indirect or direct-only light distribution. Luminaire body made of aluminium. Sound absorber for a wide frequency spectrum, to reduce the reverberation time. 3D textile fabric made of Trevira CS available in cream, taupe, green and anthracite. Direct light with precision lenses for uniform symmetrical light distribution with high glare limitation (UGR<19) for workplaces. Driver integrated into luminaire housing, available as switched or dimmable (DALI, Touch-Dim, Casambi). Colour temperature 2700K, 3000K, 3500K, 4000K or 6500K. Binning ≤ MacAdam 3. Colour rendering CRI>80, CRI>90 or Full Spectrum. Height-adjustable parallel cord suspension with transparent power supply cable. Ceiling rose to match luminaire body.



Cream Fabric | Green Fabric | Taupe Fabric | Antracite Fabric



‘The combination of textiles
and light is a natural synergy
that can lead to exciting
new sensory experiences.’

Aleksandra Gaca

↑ Serenity (Round) G2/P2, Antracite Fabric

A new era of light

Interview
Francis Vercaemst

Serenity represents new possibilities in lighting design, combining the tactile beauty of Aleksandra Gaca‘s 3D textiles with Lightnet‘s innovative approach to illumination. Serenity transforms spaces by offering a multi-sensory experience that enriches our surroundings and promotes well-being. An interview with Francis Vercaemst, managing director of Casalis, the Belgian manufacturer of the textile fabric ONDO designed by Aleksandra Gaca.

‘In 2000, I decided to start my own business to realise my vision: to work with experienced textile designers to create distinctive and sustainable textile products from beautiful natural materials, enhancing them with specific, handcrafted techniques.’

Francis Vercaemst

Lightnet: First of all, could you tell us a little about yourself, Casalis and your work at Casalis?
After completing my studies as an industrial engineer, I quickly entered the textile industry. There I gained valuable experience, got to know the beauty of different materials and production techniques and discovered my deep passion for textiles in general and rugs in particular. But I missed the uniqueness and character of the carpets that were available in Europe at the time, and it was clear to me that there was much more to offer than what was available at the time. In 2000, I therefore decided to found my own company to realise my vision: to work with skilled textile designers to create distinctive and sustainable textile products from beautiful natural materials, and to refine them using specific techniques.

Today, our products offer endless possibilities for customisation, allowing our customers to choose from a variety of shapes, colours and materials. This flexibility enables our customers to create unique, customised interior solutions that perfectly match their aesthetic and functional needs.

What inspired you when providing materials for the Serenity luminaire?
‘Serenity’ stands for calmness, composure and inner balance, and that is exactly what our acoustic textiles provide. We thought it would be great to combine our acoustics with lighting that offers the same properties. Now we have a product that enhances each other‘s properties.

How did you approach the project with Lightnet, and what was your first impression of working on Serenity together?
We were very excited to see how this would develop, and also very happy that another company saw potential in using our acoustic textiles in a different way. The collaboration went very well.

What was the most important factor for you in choosing the right materials to balance aesthetics and functionality?
The key question was: who is Lightnet's target audience and where will these luminaires be used? Based on this, it was clear that we should use our flame-retardant Ondo textiles.

How do the materials you provided reflect the combination of textile art and innovative design?
Our acoustic textiles were designed by Aleksandra Gaca. Aleksandra has dedicated her entire career to designing 3D textiles and is still a pioneer in her field. She is known for combining the rich heritage of weaving with cutting-edge technology to create high-performance fabrics that inspire and bring a fresh perspective to interiors worldwide. The groundbreaking Ondo weave features a calm, natural minimalism reminiscent of gentle wave patterns, created using an extraordinary 3D weaving technology. Ondo evokes the fluidity and movement of flowing surfaces, offering a soothing, contemporary aesthetic through the playful interaction with light as you change your perspective.

Are there parallels between Casalis and Lightnet?
I believe that Lightnet and Casalis are very similar because we share the same goals of creating unique products while prioritising sustainability in our choice of materials to make the world a better place. Furthermore, Lightnet's willingness to collaborate with external companies to develop their products shows that they are open-minded and ready to take on new challenges.

How did Casalis ensure that the materials provided for Serenity were consistent with these principles?
Ondo is made of polyester, which is not only fire-retardant but also ensures that the product is durable. The products are versatile because they can be hung in almost any room. These features ensure that our products last a very long time. Furthermore, like all our products, the Ondo material is manufactured here in Belgium.

'I believe that Lightnet and Casalis are very similar because we share the same goals of creating unique products while prioritising sustainability in our choice of materials to make the world a better place.'

Francis Vercaemst

How do you see the future of material development? Are there any trends or innovations that inspire you?
We at Casalis are very positive about things. Every day, new techniques and materials are discovered that never cease to amaze us. This ensures that we can design endlessly and never get bored.

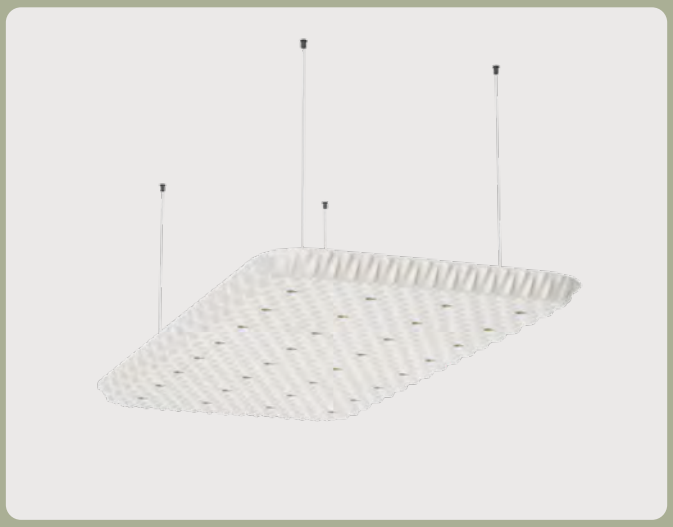
Are there any other projects at Casalis that you are particularly looking forward to?
In addition to acoustic products and textiles, Casalis has specialised in the production of carpets from the very beginning. We are constantly striving to push boundaries and in 20 years we have built very strong relationships with various production partners that offer us endless possibilities to once again create unique products. We are currently working on new collection lines.

What does the 'Serenity' project mean to you personally and how should people experience the materials in the luminaire?
It opens new doors and gives birth to new ideas. I hope that Serenity brings elegance and calmness to any room, while also surprising and stimulating the senses with its design and textiles. Serenity has once again shown how many possibilities textiles offer.

'Serenity has once again shown how many possibilities textiles offer. Now we have a product that enhances the properties of the other.'

Francis Vercaemst

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