

Flying high in Zurich

A light ceiling with additional functions opens up the skies.



Anyone flying out of Switzerland's largest airport in Zurich will be taking to the skies before they even leave the ground – optically at least. For the light ceiling incorporating SEFAR® Architecture IA-80-CL Fabric ensures a truly unique sense of space through the transmission of a sophisticated, controlled light effect coupled with the targeted application of acoustic absorption.



Nowhere does one feel closer to the skies than at an airport. This is especially true at Zurich Airport, where passengers in the newly refurbished passage to Terminal 1 already get a sense of taking off. This effect is made possible through the selective use of SEFAR® Architecture IA-80-CL Fabric. During the course of his research, architect Florin Baeriswyl from dai AG in Zurich became aware of the many different types of architecture fabrics produced by Sefar. After initial discussions and more detailed planning, it became clear that this material would be ideal for spatial design, illumination, and acoustic insulation. Perfect, in fact, for

large and small projects in Zurich and the whole world.

Open to something new

Florin Baeriswyl and his team at dai have symbolically opened the airport to the skies. Adhering to the stringent safety regulations for public places, the light ceiling was created in a patented, detailed frame design. Architect Florin Baeriswyl explains: "For us it was important that in spite of its enormous surface area, the entire construction should be airy and slightly transparent. Only in this way was it possible to create the sensation of 'open sky' in the interior of an airport building."

Zurich Airport

Terminal 1 / Car Park Lift 1
Architect
 Florin Baeriswyl, dai AG, Zurich, Switzerland, www.dai.ch
Engineering
 ArtEngineering GmbH
 Dr. Ing. S. Greiner
 Stuttgart, Germany
 www.greiner-engineering.com
Fabric
 SEFAR® Architecture IA-80-CL

SEFAR LIGHTFRAME®:
 Easy to assemble and maintain thanks to its lightweight and intelligent supporting structure.

SEFAR® Architecture A-80-CL
Fabric material
 PVDF (polyvinylidene fluoride), calendared, open-pored
Fabric width (cm)
 146, 270, 340
Weave Twill 1/3
Area density (g/m²) 440
Highest tensile strength warp/weft (N/ 5cm)
 1,800/1,000 as per EN ISO 13934-1
Highest tensile elongation strength warp/weft (%)
 35/27 as per EN ISO 13934-1
Tear force warp/weft (N)
 40/80 as per DIN 53859-5
Fire resistance
 B1 as per DIN 4102; B-s1, d0 as per DIN EN 13501-1

Light transmission (%)
 > 80 as per ASTM D 1003
Reflectance (%) 19
Absorption (%) 1



Behind the scenes of the light ceiling: Lights, cabling, and building services technology – unseen by the public at Zurich Airport.

Light and sound

The finished result: by means of a clever interplay with the lighting technology behind it, the fabric ceiling imparts a pleasant feeling of familiarity and calmness – ideal for nervous flyers. Irregular changes between cool and warm light generate that “light feeling.” At the same time, this indoor sky suppresses the constant sound of multiple footsteps, rolling suitcases, and all that makes up a busy international airport. With its special acoustic properties, SEFAR® Architecture IA-80-CL Fabric ensures a highly efficient reduction in background noise.

Intelligent applications

“A fabric that transmits light like the clouds and swallows sound like the sky; in Sefar we have found a partner who constantly surprises us with functional materials, never previously thought possible,” enthuses Florin Baeriswyl. Today, the light ceiling at Zurich Airport is a prototype and successful working example of the intelligent application of architecture fabrics in public places – not least because of close collaboration between the Sefar development section, the planning architects, and the manufacturers.

“Architectural fabrics are very much the trend. And Sefar is the trendsetter.”

Architect Florin Baeriswyl from dai AG in Zurich, on new discoveries, trends, and previously undreamt-of possibilities.

You are one of the first architects to have used Sefar Architecture Fabrics. How did you come across these special materials in the first place?

Florin Baeriswyl: Actually we found one another. Sefar commissioned me and my dai office to advise the newly established architecture sector of the organization on their market branding. The aim was to position this sector in the market place as a stand-alone division. In addition to our consultative role (in the interdisciplinary activities of dai), the fabric naturally excited me as an architect.

How did the further collaboration which followed develop from that? Where have you provided input? In which areas have you been inspired by existing architecture fabric ranges?

Florin Baeriswyl: This project gave us a deep insight into the diversity of Sefar products. In this way, we have got to know and value the creative potential and versatility of this partner. On this basis, it was possible to develop new areas of application in architecture and design situations together, for example in the form of a light ceiling at Zurich airport. But also in the course of the development of the special illumination “natural sky,” which controls the natural interplay with light and at the same time provides an echoabsorption function.

What application possibilities do architecture fabrics open up?

Florin Baeriswyl: The possibilities are as good as limitless. I find architecture fabrics interesting because – depending on the concrete product – they combine so many different properties. For example, they are reverberation absorbent, nonflammable, UV resistant and thus suitable for outdoor applications, and easy to keep clean. Even oil, ketchup, or coffee leaves no trace behind.

Apart from that, the fabric can be formed, tensioned, and hung in almost any way – and it has an exceptionally

low intrinsic weight. No other rigid architectural material can offer that.

How do your clients react when you suggest the application of fabrics in spatial planning and design? Is their first reaction more one of interest or of skepticism?

Florin Baeriswyl: Initially it is definitely one of skepticism, and that is understandable since this versatile material is not yet widely known. But as soon as I show them product samples, tell them about its many additional benefits and functions, and provide testimonies of working examples, this turns into enthusiasm. Suddenly most clients want to belong to the architectonic trendsetters. That’s what we want!

Are we really witnessing the beginning of a new trend? In which areas can architecture fabrics still make advances?

Florin Baeriswyl: The best thing about this development is that we are still really only at the beginning. Theoretically – and of course also practically – there are hardly any limits to the application of SEFAR® Architecture Fabrics. Thanks to exceptional physical properties such as the UV resistance already mentioned, the fabrics can be used anywhere in the world. With unbelievable additional functions such as electrical conductivity, these fabrics pave the way for previously undreamt-of possibilities. I am already excited about what can still be achieved with it. And to return to the original question – yes, architecture fabrics are very much the trend. And Sefar is the trendsetter.

