Project. Employing light as an additional construction element gives free rein to creative ideas and makes illuminating transformations a reality. For his converted detached house, the owner wanted to implement a very special and hitherto unseen vision. A single light element housed in the stairwell covering three floors should provide ambient illumination for each step taken. The light itself is balustrade and banisters at the same time, from cellar to roof.

Concept/Design. The stairwell should be illuminated with artificial light with a positively diffuse luminosity while the material service must also satisfy the high aesthetic and haptic demands placed on it. These attributes and the high inherent luminance of the photometric fluoropolymer fabrics from Sefar made them the perfect choice for the designers. The fluoropolymer dirtrepellent coating means that surfaces can be lightly cleaned if necessary.

Construction. The two-part light element with total measurements of 7.3 x 1.5 x 0.12 m is constructed in continuous form over three storeys. The structure is made from circumferential profiles in stainless steel. These serve as balustrades and element endings. The two-layer, stretched fabric is held firmly in place by an internal and invisible tensioning device. Providing for safety on stairs in a family dwelling is of paramount importance. The FL-light technology concealed within the light elements is accessible through openings in the U-profile casing. At the same, the light elements are sound absorbers; the fabric is echo-reducing over the micro-porous structure and actively helps to minimalize the frequencies generated by acoustically reflective surfaces such as stone and wood.

Project/Location: Detached house, Sonnenberg, Abwil SG, Switzerland
Implementation: Dörig Metallbau AG, Waldkirch, Switzerland www.doerigmetallbau.ch
Fabric: SEFAR® Architecture IA-80-CL (previous description AS 02-65-K)
Photos: inform architekten, Peter Koehl