

Light Wing Ceiling in the Design-Center of Mercedes-Benz, Sindelfingen, Germany

A controllable, semi-transparent light wing ceiling ensures the presentation of new vehicle models under daylight conditions that are optimally simulated. This lighting concept is able to highlight selective areas, by using a kind of an opaque filter that refracts incoming light. Such an effect requires that the light wings are individually movable on the one hand and, on the other, that the material used is both extremely translucent and refractive. Therefore, a special milky white synthetic fabric called "Aeronautec" is used for the lower membrane; for the top surface, a transparent ETFE film ensures optimum daylight efficiency.

The individual light wings which form three rows arranged lamellarly (each consisting of 15 wing elements), are made crease-free and dimensionally stable by pneumatic tension upon operation, i.e., by a constant internal wing pressure of approx. 15 mm WS.



Project data

Architekt / Architect	Renzo Piano
Konstruktion / Construction	IF, Reichenau
Statik / Statical Calculation	IF, Reichenau
ÜGF / Covered Area	1.300 m ²
Baujahr / Year of Construction	1998

