

Ceiling sail as an alternative to the acoustic ceiling

Refracting sound

In order to diminish the hall effect in the former assembly halls and to maintain the flexibility of the room design at the same time, the Munich-based Spinner GmbH decided during the rededication of office premises in favour of the acoustic sail from Wilhelmi. The decision was not difficult — the corporate boss and employees had already gathered positive experiences with this variation of sound absorption in other premises.

The Spinner GmbH, which has manufactured passive construction elements for radio installations as well as satellite and mobile radio ground stations since 1964, resides in a 1950's building in downtown Munich. In the meantime, only the sales and accounting departments work there in addition to the business management. Developmental, construction and production activities are accommodated in Feldkirchen-Westerham (Upper Bavaria).

After the construction and developmental departments also moved out the halls were empty. Corporate boss Stephanie Spinner-König quite deliberately decided for a rededication in open-plan offices accommodating eight to ten people each. "We took a look around Munich. But the rents were so high that we finally decided to remain here in this building, which belongs to the company", said the chairwoman of the business management board. The conversion of the premises was apparently more cost-effective than the relocation into another building.

Among other things, converting the approximately 3.50 metre-high halls into offices was a challenge due to the acoustical "hall effect". The commissioned architect Claudia Andress decided in favour of the "Solitary Canopy" acoustical partial-space solution in concave version from Wilhelmi. "We wanted to get away from the self-contained standard acoustic ceiling", explained the building master. In addition, she wanted to retain the industrial character of the premises that are still emphasised by the new stainless steel media columns, which are specially produced by a locksmith and run from the ceiling to the floor.

The approximately 60 ceiling sails are based on the sound-absorbing, hardly inflammable acoustic panel *Mikropor S* — a light chipboard made of fresh coniferous wood, which is furnished with acoustic fleece on both sides and whose visible side is sprayed with acoustic paint. As a result of the microporous visible area the incident sound penetrates the board core and is absorbed — without additional coating of insulating materials. Yet another important argument for the builder-owner to decide in favour of such a solution instead of a self-contained, suspended ceiling was the retention of the spatial flexibility. Because the ceiling sails — which are suspended on filigree stainless steel cable constructions — are able to be placed in other spots without any complication during any future reconfigurations. The "directionless" boards (because they make do without the frequently customary slots), which at Spinner are sprayed with white acoustic paint, contrast well with the blue colour of the actual ceiling, which is coated in spot technique. According to Jürgen Bencker, Wilhelmi sales manager in Munich, apart from that the *Mikropor S* fixtures are durable: Slightly soiled boards are easily cleaned with water and soapsuds. In the event of more severe impurities they could be re-sprayed. "Experience has shown that this is only the case every ten years or so. The entire process is able to be repeated about seven times without the acoustic properties essentially being altered. The sails are distinguished by their long-term value".

Apart from the ceiling design, the boards are also suitable for partial surfaces on the wall. And, according to Bencker: "We also supply furniture manufacturers, who coat fronts and rear walls of cabinets with the acoustic material."

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