Efficient air distribution and a healthy indoor climate

Photo: 3xSkak A/S

Multidirectional ventilation solution

At the brand new aquatic centre at Frederiksberg in Copenhagen a number of rooms have been equipped with textile ducts from KE Fibertec:

Swimming and sports area
Therapy area
Water play area
Fitness area
Storage room
Office
Kitchen
Restaurant
Activity room

Photo: Martin Håkan / CoverGanda.dk

Facts

Consulting engineers:	Sweco A/S
Architects:	3xSkak A/S
Installation contractor:	WK-Danklima A/S
Textile ducts:	KE Fibertec AS

Case: Water & Wellness Flintholm

Photo: Martin Håkan / CoverGanda.dk

Low air velocity and a good indoor air quality

Textile based ventilation enables constant low air velocity at the water surface resulting in least possible evaporation no draft problems for the visitors.

The even distribution of air across the entire duct surface ensures an efficient and draft-free ventilation of the room, and the low velocities at water surface also reduce evaporation.

> We cooperate with KE Fibertec as they always supply correct advice and a good solution using quality products. Textile ducting not only provides better air distribution, but also a less expensive solution than steel ducting. The contractor is very satisfied with the indoor air quality and the yellow textile ducts that match the interior. Originally, the ducts were chosen in the colour white, but fortunately the architect was encouraged to choose a more eye-catching colour.
>
> **Project Manager Flemming Sall, WK-Danklima A/S**

Photo: Martin Håkan / CoverGanda.dk

Flexible textile ducts

Textile based ventilation has the advantage of being of a flexible and light material, rendering it a suitable solution for projects involving obstacles in the ceiling.

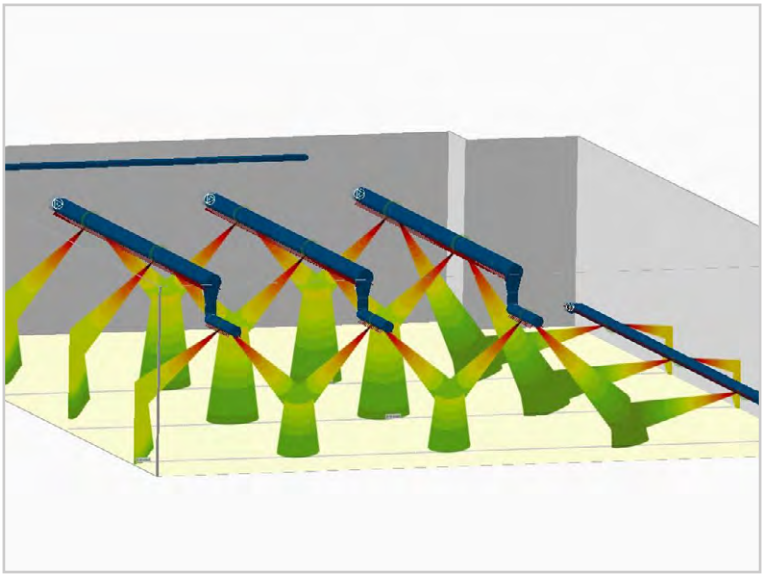
This flexibility proved necessary in this case since in the swimming pool area we had to allow for the jumping pit that required a change of ceiling height.

This challenge was solved by letting the textile duct follow the vertical section and then letting it continue along the ceiling below the jumping pit.

Case: Water & Wellness Flintholm

Photo: BIM model in Revit

Scan the code to watch the film about Water & Wellness Flintholm and TBV Designer



Velocity at water surface max. 0.15 m/s

Design and flow visualization with TBV Designer

KE Fibertec has developed the TBV Designer program in order to be able to document technical data supported by know-how.

The program enables flow visualizations and documentation of the solution. It also features freedom of design, spatiality, and information on velocity within the occupied zone height.

For this project KE Fibertec has prepared BIM objects for Revit to ensure an optimum solution.

KE Fibertec AS is market leader in Textile Based Ventilation. We create good indoor climate through our tailored textile ducts for installation in sports arenas, offices, laboratories, schools etc.

Textile ducts are customizable, easy to install, washable, hygienic, and come in all shapes and colours.

For more information please visit our website: www.ke-fibertec.com.

> We recommend a high impulse system for swimming pools where we apply textile ducts with nozzles or inject holes. By doing so we avoid problems of corrosion and condensation on ceilings, windows, and other cold surfaces.
>
> **Development Manager Anders Olsen, KE Fibertec AS**

Case: Water & Wellness Flintholm

Photo: Martin Håkan / CoverGanda.dk

Corrosion- and condensation-free

A swimming pool environment with high air humidity makes high demands on the ventilation solution.

With KE Fibertec's textile ducts you obtain a stable temperature and air humidity as well as avoid corrosion of ducts and fittings, condensation on ceilings and windows, and problems of stagnant 'chlorine air'.

Our engineers have many years of experience in dimensioning air distribution systems that not only integrate into the design of the swimming pool area, but also provide energy-optimized air distribution.

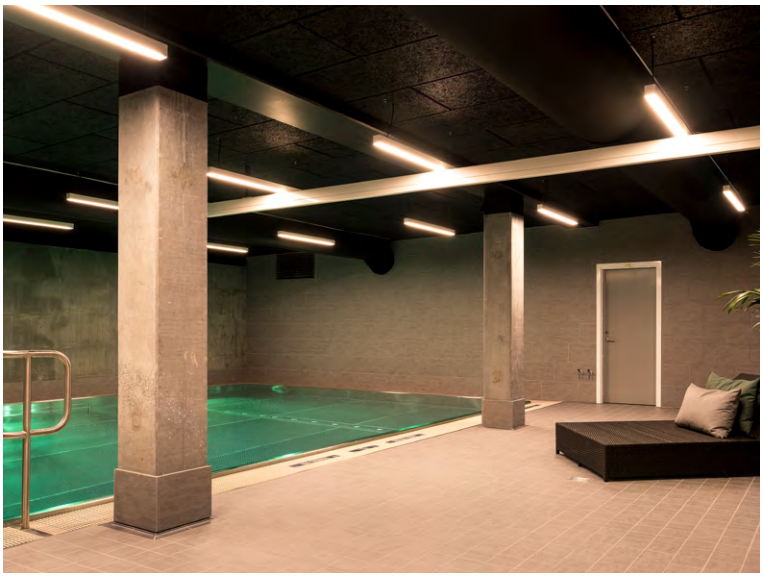
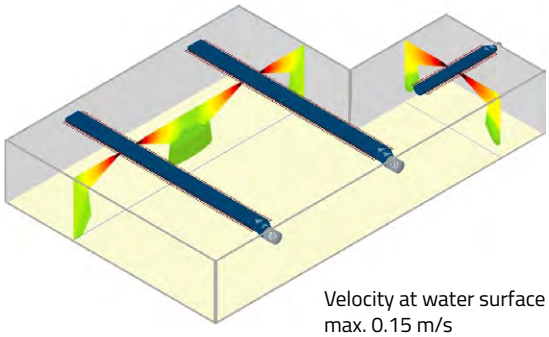


Photo: Martin Håkan / CoverGanda.dk

Pure wellness and therapy

Discreet black textile ducts that merge into the ceiling were installed in the wellness and therapy room.

The air distribution is silent by means of a hybrid solution made of the sustainable GreenWeave material.



Velocity at water surface
max. 0.15 m/s

AIR THE WAY YOU WANT

KE Fibertec AS
Industrivej Vest 21
DK-6600 Vejen

Tel. +45 75 36 42 00
info@ke-fibertec.dk
www.ke-fibertec.com