

Healthy Indoor Climate with Textile Based Ventilation. KE Fibertec AS is leading supplier of textile based ventilation (TBV). With our specially designed textile ducts we create a good indoor climate in sports halls, offices, laboratories, schools, etc.

Textile ducts can be customised for almost any purpose. They are hygienic, easy to install and maintain and can be supplied in a wide range of shapes and colours.

We take our social responsibility as a company seriously and are driven by creating solutions that not only leave the smallest possible imprint, but also create the healthiest possible indoor climate. That is why we work with CSR and sustainability in all aspects of the company.

The KE Fibertec Group is composed of four sales subsidiaries in the UK, Germany and the USA as well as Euro Air A/S. Further, the group has three production companies, KE Fibertec Væveri (weaving mill), ADC Inc., USA, and Euro Air CZ.

Read more at ke-fibertec.com



**AIR THE WAY YOU WANT** 









# Air the Way You Want.

KE Fibertec AS develops, manufactures, and markets "Good indoor climate" or air distribution systems based on fibre technology and sustainability.

The principle is to create draft-free and uniform distribution of the ventilation air through our tailored textile ducts.

Today, air distribution systems are used in almost all applications - from industry to sports centres, office facilities, laboratories, food industry, and many other applications that require a good indoor climate.

In 2012 KE Fibertec succeeded in getting CradleVent® certified as the first Cradle to Cradle ventilation duct in the world.

#### Benefits of textile ducts.

- Efficient air distribution and good indoor climate
- Flexibility and customised solutions
- Unique materials and colours
- Fire approved materials
- Hygienic and easy to wash
- Great acoustic properties
- No condensation problems
- Quick installation and balancing
- Ergonomically advantageous with low weight



## World's first Cradle to Cradle certified ventilation duct.

CradleVent® is the world's first ventilation duct to be approved as a Cradle to Cradle certified product by the prestigious EPEA Institute in Hamburg, Germany. CradleVent® is our idea of a long-term and sustainable product for air distribution in offices, schools, laboratories, sports halls, public buildings, and other comfort environments.

The increasing demands of contractors and architects on sustainability and resource efficiency make it attractive to include CradleVent® as a well-documented component of construction.

#### **Documented sustainability.**

In the Cradle to Cradle concept waste is regarded as nutrients for a new production process which will balance the cycle.

When the product is no longer usable we take it back for disassembly and the various parts will be recycled in another technical cycle. By doing so nothing is wasted.



#### Efficient air distribution.

Compared to steel ducts, textile ducts offer efficient, uniform, and draft-free distribution of fresh air without "dead zones", a good indoor climate, and quick and easy balancing.

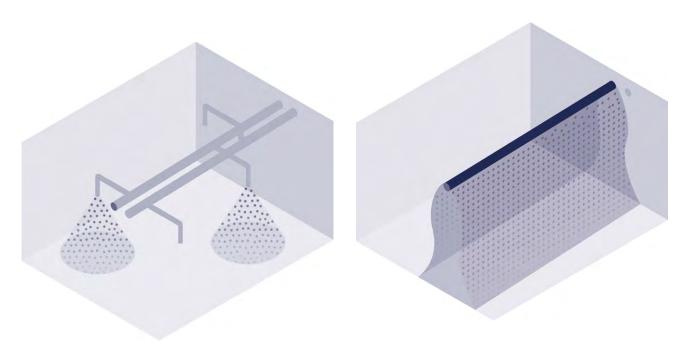
#### Better ergonomics.

Our materials weigh 260 - 330 g/m², so a TBV system weighs far less than steel ducts. At the same time, textile ducts are easier to handle and transport as they are folded and packed into cartons, so that the total weight is maximum 25 kg per carton.

KE Fibertec's flexible and lightweight textile ducts are dimensioned to fit each room. Our suspension rails come cut to size, making installation simple and time-saving.

#### Sustainable benefits.

- Good indoor climate with efficient air distribution results in lower energy consumption
- Flexible and customised solutions reduce material waste
- Low weight means less fuel consumption and lower carbon emissions during transport
- Maintenance programmes extend life
- Option of recycling end-of-life CradleVent® systems



**Conventional steel duct** 

Innovative textile duct



#### Flexibility and tailored solutions.

Flexibility and tailored designs characterise KE Fibertec's textile based ventilation solutions. Here you may freely choose the size that fits the architecture of the building the best. Also you may choose from an almost unlimited range of system layouts, colours, materials, and whether the TBV system must be passive, hybrid, or active.

#### Fire tested and approved materials.

Naturally, all KE Fibertec materials have been fire tested and approved according to international fire standards incl. EN 13501-1.

### Unique materials and colours.

As the only manufacturer in the world we offer customised woven textiles from our own weaving mill. Our materials are designed for air distribution - not for tents or patio blinds when it comes to uniform air distribution, shrinkage after washing, colour-fastness, and not least best possible Dust Holding Capacity.

We offer a wide range of materials and colours. Read more about our weaving mill on page 10.





#### **GreenWeave**

Energy-efficient and sustainable textile duct material.

GreenWeave is especially suited for comfort installations with high demands on indoor air quality. Typical applications are offices, schools, laboratories, conference centres, and cold work rooms in food industry.

- Filters the supply air as an M6 prefilter acc. to EN779:2012
- Longer washing intervals with staple fibre yarns
- Dust holding capacity of 25 g/m² textile surface acc. to EN779:2012
- Fire tested acc. to EN13501 B-S1-d0
- 100% recyclable and Cradle to Cradle certified material
- GW materials are woven from dyed yarn, which reduces waste water consumption by approx. 2/3 compared to traditional piece dyeing



#### MultiWeave

Durable and versatile textile duct material.

MultiWeave is a multifunctional material that is highly suited for many different applications, from cleanroom facilities of ISO class 4, industrial facilities and sports halls to equalising rooms in meat factories.

- Material made of multi-filament yarn that works as a G2 prefilter
- Cleanroom certified as class 4 acc. to ISO 14644-1
- Fire tested acc. to EN13501
- Highly durable material. Tear strength 110 210 N (EN ISO 13937:2)



#### ZeroWeave

Airtight textile duct material.

Low-maintenance material with a wide range of applications such as supermarkets, large sports arenas, swimming pools, high-bay industrial facilities, and rooms with high dust generation or limited accessibility.

- Airtight material with zero filter efficiency
- No PVC, halogens or other harmful substances
- Fire tested acc. to EN13501 B-S1-d0 without any finishing
- No condensation when used in environments below 90% RH

#### CRADLE TO CRADLE COLOURS





DARK BLUE

/ 5002



19-5708-TP

YELLOW 14-0955-TF / 1028





RED 18-1655-TP / 3031

LIGHT GREY

12-4705-TP

/ 9002





PANTONE / RAL

DARK GREY

17-4402-TPG

/ 7042

COURTED

ANTISTATIC

#### CRADLE TO CRADLE COLOURS







DARK BLUE 19-3864-TF









LIGHT BLUE 16-4132-TP













PANTONE / RAL







#### PANTONE/RAL



STOCK COLOURS





RED 18-1655-TP / 3031

#### STOCK COLOURS



WHITE 11-0601- TP / 9010



LIGHT GREY 14-4201-TP / 7047



/ 5002

PANTONE / RAL



#### Comfort.

Good indoor climate with a very high demand for comfort in offices, conference halls, concert halls, sound studios, canteens, schools, child care facilities etc. and in general where many people are assembled.



#### Sport and leisure.

Very energy-efficient solutions for constantly changing ventilation demands in sports halls, fitness studios, shooting ranges, swimming pools, ice rinks etc.



#### Showrooms.

Often a challenging area due to constantly changing user demands in showrooms, exhibition halls, supermarkets, department stores, pavilions, museums, atriums, etc.



#### Laboratories.

Handling of high air volumes at minimum air velocity in the occupied zone in VAV fume cupboard extracts, pharma production, "clean room" classified R&D laboratories etc.



#### Food industry.

No condensation problems, no growth of microorganisms in the bespoke woven materials from KE Fibertec for equalising rooms, warehouses/ terminals, high bay warehouses, etc.



#### Industry.

Guarantee that fresh air is delivered to the employees without draft in light industry, heavy industry, printing works, extreme cooling facilities, vehicle workshops etc.

### FBS Panels - ceiling diffusers for draft-free air distribution.

KE Fibertec offers FBS ceiling panels for diffuse or directional ventilation in schools, offices, and other comfort environments. The system operates at a lower pressure than that of standard ceiling diffusers thus optimising energy efficiency.

The fresh air is evenly distributed across the entire surface of the panel which results in a healthy indoor environment without problems of draft.

FBS ceiling panels are ideal for rooms with limited headroom above the ceiling and rooms with low ceilings.

#### Benefits of FBS ceiling panels.

- Draft-free air distribution
- Low pressure loss
- Low sound pressure level
- Low weight
- Quick and easy installation and maintenance
- Fully integrated in suspended ceilings
- Short delivery time

1200x600







**End** 600x600 / 1200x600



Combi



Combi

600x600







### The weaving mill.

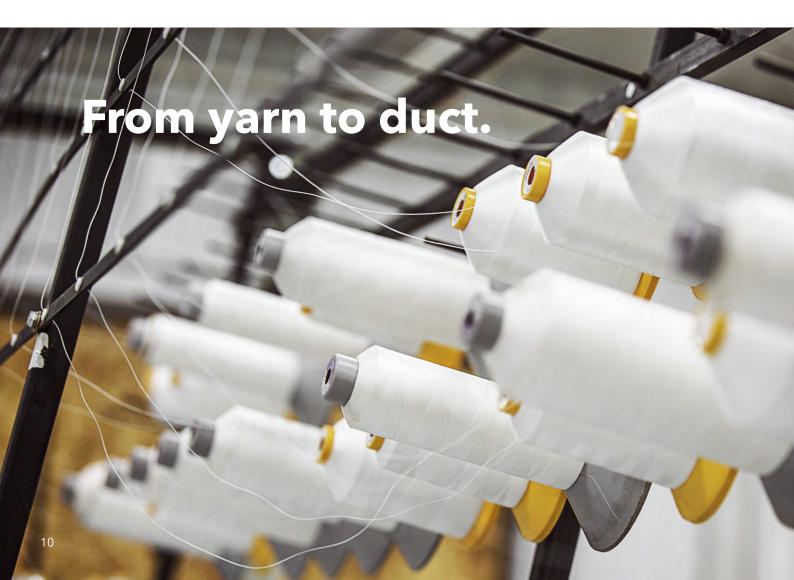
KE Fibertec is the only manufacturer of textile ducts worldwide to have their own weaving mill, KE Fibertec Væveri. The weaving mill was established in 1972 and is today run by the third generation of the family business.

The weaving mill exclusively manufactures fabrics for textile duct ventilation which is a unique situation on the global market and which gives us a valuable know-how on these materials for the benefit of our customers.

To have our own weaving mill as next-door neighbour gives us a very flexible cooperation partner who can meet our demands and requests on especially quality control and supply security.

The weaving mill has very strict demands on suppliers of yarn, and all raw materials are subject to extensive input control to ensure that the permeability is unchanged even after many washes. A barcode enables us to monitor the fabric which gives us full traceability in relation to production date, permeability, etc. - from reel to finished product delivered and installed at the end user.

Further, the weaving mill supplies special materials such as Nomex and antistatic Trevira CS. KE Fibertec Væveri manufactures 7 different types of "permeability" and has a range of 89 different product items.





### Washing with care.

A ventilation duct must be maintained in order for it to maintain its performance and thus be energy-efficient. This applies to both textile ducts and spiro ducts.

#### Ensure a healthy indoor climate.

The ventilation ducts will become dirty over time, and dust will be deposited in ducts, on dampers and valves. Dust, dirt and, in the worst-case scenario, microorganisms in the ventilation system will reduce its efficiency and may, in some cases, be directly harmful to people's health.

To ensure a healthy indoor climate and the best possible energy efficiency, it is therefore important to regularly inspect ducts, dampers, valves and filters in the ventilation system.

Washing and maintenance costs must be included in the design as early as in the project planning phase. It is a mistaken belief that you can choose "maintenance-free components" like some suppliers claim, because they do not exist.

With correct maintenance and regular washing of the textile ducts it is possible to save energy and extend the life of the product. KE Fibertec DK and several KE partners offer inhouse washing and maintenance services that include:

- Tailored washing concepts for all industries
- Option of express washing
- Antibacterial washing
- Repair service
- In-house storage of spare ducts
- Removal and installation of ducts before and after washing
- Transport of textile ducts to laundry
- Documented visual and quality control

**Contact KE Fibertec for more information.** 

