

**FOCKE MUSEUM IN BREMEN** VISUAL AND TECHNICAL ASPECTS IN PERFECT HARMONY



no. 28

**Construction and implementation of an air duct system as a roof installation and underground**



**VENTAFLEX®**



Greater efficiently in air ducts



## Design and construction of an air duct system for the "Focke Museum" (Bremen State Museum of Art and Art History)



The main building of the "Focke Museum" from 1964 was the first new construction of a state museum after World War II. The design by Darmstadt architect Prof. Heinrich Bartmann in the classical modern style is today considered one of the "highest quality buildings in Bremen of the 20th century." It was important to do justice to this architectural significance in the planning. Furthermore, the museum does not have much room to manoeuvre financially, which had to be taken into account in the implementation.

### Practical comparison between VENTAFLEX® and fiberglass insulated spiral ducts

With an insulated ventilation duct system with the following specifications:  
 length: 50 m  
 series: 630  
 insulation thickness: 5 cm  
 Δ t: 20 K

Thus the following performance must be achieved:

**Ventaflex®:** 900 W  
**Third party ducting:** 1,430 W

**Conclusion:** The VENTAFLEX® system reduces the ongoing operating costs and offers energy and cost savings of up to 40%.

### The task

1. Cost-efficient air conditioning of the exhibition rooms via the roof
2. The system should not be visible from in front of the building
3. Low load capacity of the roof
4. The system can be seen from the elevated neighboring building
5. Parts of the air ducts go through the ground

### The VENTAFLEX solution

- ▶ 1. VENTAFLEX® air duct systems are significantly more cost effective than comparable insulated ventilation duct systems
- ▶ 2. Modular ducts of Ø 200 mm – Ø 520 mm and oval ducts were used. This allowed a low installation height to be achieved with optimal volume.
- ▶ 3. VENTAFLEX ducts are 70% lighter than comparable spiral ducts and thus ideal for use on the roof.
- ▶ 4. The attractive appearance of the installation saves the need for costly measures to disguise the system
- ▶ 5. The complete air duct system was installed in a very short time by the Koop-Brinkmann company: On the roof, outside, inside, underground – everything fits together seamlessly!

### Overview of advantages

- **Costs savings** in the materials
- **More installation options** due to the variety of designs
- **Savings in operating costs** (up to 40% less energy loss, up to 10% less pressure loss)
- **Lower installation costs** (up to 60% less installation time)
- **Up to 70% weight reduction** – important for the roof structure and handling.
- **Visually attractive**



# VENTAFLEX®

Greater efficiently in air ducts

**VENTAFLEX**  
**Vertriebsgesellschaft mbH & Co. KG**  
 Im Gewerbegebiet 3  
 48612 Horstmar - Germany

Further references at [www.ventaflex.de](http://www.ventaflex.de)

