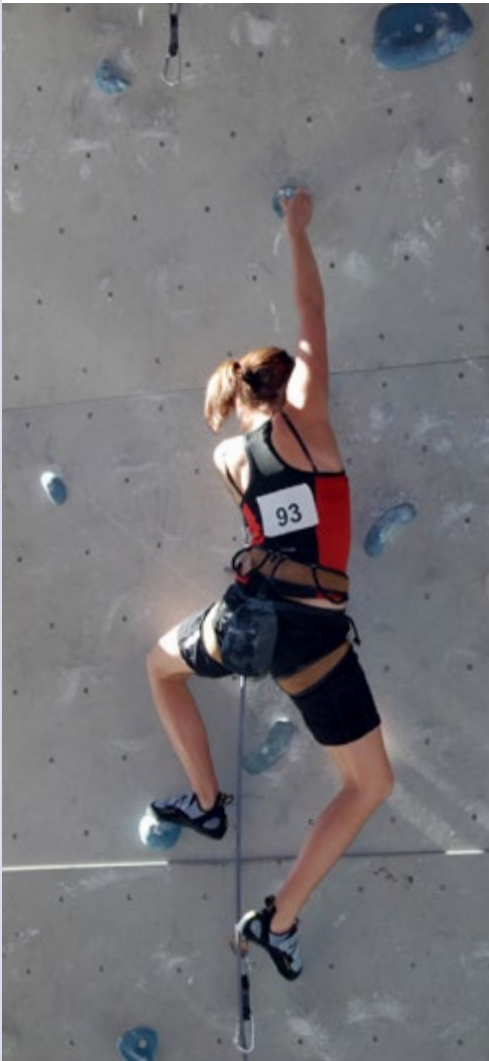


**MAGIC MOUNTAIN BERLIN:  
HIGH PERFORMANCE 15 M UP**



**Air ducts leading from a HVAC system constructed in an exterior area into an existing climbing gym**



**VENTAFLEX®**

Greater efficiently in air ducts



### Magic Mountain Berlin: Air ducts leading from a HVAC system constructed in an exterior area into to climbing gym



In Wedding in Berlin, the „Magic Mountain“ invites visitors to an indoor climbing experience. Artificial rock faces and routes of varying difficulty – up to difficulty level 10 – are available to choose from in the hall. But for the HVAC planners, the actual challenge was outside the hall: installing an air duct system over 15 meters high on the exterior facade. No easy exercise – difficulty level 10 at least – unless your partner is VENTAFLEX.

#### 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:

<b>Ventaflex®:</b>	<b>900 W</b>
<b>Third party ducting:</b>	<b>1,430 W</b>

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

#### The task

1. Air ducts leading from an HVAC system installed in the exterior area into the hall up to 15 m
2. Difficult access and complicated installation conditions, since it was necessary to work at heights of
3. Good insulation to ensure the energy efficiency of the HVAC system in any season and in any weather.

#### The VENTAFLEX solution

- ▶ 1. Modular Ø 580 mm ducts were used in combination with various bends. “Venta-Snap” and “VentaFix” mounting clamps were used for mounting. additional insulation, eliminating an entire work step.
- ▶ 2. VENTAFLEX ducts are 70% lighter than comparable spiral ducts – this made working at great heights significantly easier and safer. The installation was performed by the YIT company. Mr. Hanauer gets to the heart of the cooperation: “In our work – just as in climbing – you have to be able to rely on each other. We chose exactly the right partner in VENTAFLEX.”
- ▶ 3. The excellent insulation value of the VENTAFLEX ducts (thermal conductivity group 022) saved the need for

#### 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.
- **Rapid individual adaptations**

# VENTAFLEX®

Greater efficiently in air ducts

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

