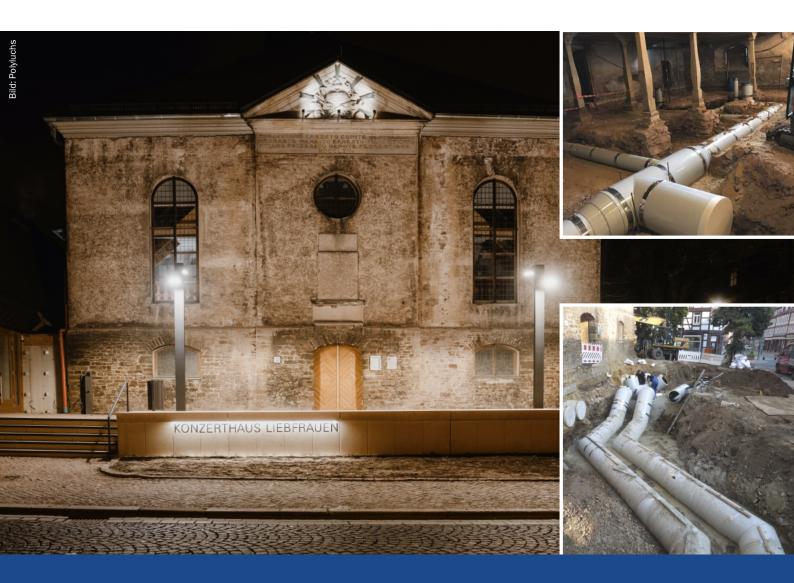
PRACTICE 56 REPORT 50 Application examples for planners of complex construction projects





Expansion of a historic church to a concert hall



Application area for VENTAFLEX®:
Underground installed air ducts
for comfortably temperated air in the event hall

Baroque inside and outside, high tech in the underground: the concert hall in Wernigerode

The listed Liebfrauen church is brought back to life

Task

The about 250 year old Liebfrauen church in the heart of the little Harz Mountain's town was supposed to be transformed into a concert hall on behalf of the culture foundation Wernigerode, 4 Million Euro in total were available from public funding, donations and foundations for the renovation. 480 visitors will be able to experience the unique acoustics of the historic building in future - project manager Rainer Schulze describes it in this way: "The ceiling is from the 18th century, made of wood and arched and when the music sounds, the ceiling resonates. The visitor feels as if he sits in an instrument."

This quote lets one sense, with which sensitivity the renovation of the listed building had to be done: Every supply could only be done through the ground – thereby also the ventilation and air extraction of the concert hall. A task which is downright predestined for the VENTAFLEX® air ducts: applicable inside and outside in the ground, insulated and tight, flexibly adaptable to existing conditions and quiet in running operation. We wish all culture lovers unforgettable moments in the Wernigerode concert hall Liebfrauen church from March 2022 on - and this certainly in a pleasant, comfortable atmosphere ...



VENTAFLEX® solution

The existing building structure requires the creation of diverse custom-made floors/ offsets in the duct system.

Inside: about 250 m below base plate underground installed air duct and moulded parts in Ø 300 to 650 mm.

Outside: about 54 m ø 630 air ducts with about 12 curves (45°)

Advantages due to the VENTAFLEX® system

- + Individual adaption to the conditions by special components
- + Up to 70 % less weight advantages for transport, handling and installation
- + Reduction of the operating costs up to 40 % less energy loss, up to 10 % less pressure loss and up to 99 % less leakage loss
- + Ideal thermal insulation WLS 022 reduces condensate formation
- Tested technology handling and installation are self-explanatory, therefore easy delegation to local specialist companies