



# Ventilation with ELGEF Plus – hygienic and airtight.



Ventilation systems need to meet stringent hygiene standards to create a good indoor climate and contribute to the health of all people in the building, which requires ventilation systems that are corrosion free and airtight. Tight deadlines and cramped conditions often pose extra challenges for everyone involved in an industrial building project.

## **Project background**

During the construction of the 6-storey office and commercial building for Stirnimann AG, the fresh air intake had to be relocated to the ground outside, due to the limited space available inside. The ventilation ducts for the fresh air intake and exhaust needed to comply with food hygiene regulations and therefore had to be hygienically flawless and airtight. The tight bends and limited time available for the project only added to the challenges.

### Selected technical solution

Due to the formation of condensation and for hygienic reasons, a corrosion-free solution was required. Together with other valuable advantages of the Polyethylene, the use of d710mm SDR33 polyethylene pipes and the ELGEF Plus electrofusion couplers were the obvious choice. The piping system construction firm, Gebrüder Meier AG, also had to overcome structural challenges in addition to the time pressure. As a result, segmental arches were prefabricated in the factory to the exact dimensions required for the tight bends on the building. The thin-walled SDR33 pipes were also quickly and easily installed with the aid of re-rounding tools and the active reinforcement of the ELGEF Plus couplers d710 mm.

# **Accomplished improvement**

Despite the extremely tight schedule, the large-diameter PE pipe products were delivered on time. Thanks to the simple assembly of the ELGEF Plus couplers, the piping system was constructed quickly and seamlessly. The intake and exhaust air duct on the building is corrosion-free and airtight, with a welded polyethylene piping system, which guarantees trouble-free operation and a long service life.



Tight bend of the fresh air duct d710 mm directly on the building.



Prefabricated segmental arches were connected using ELGEF Plus couplers, to ensure the system is airtight.

# **Customer benefits**

- Corrosion-free PE pipe, even with condensation.
- Meets stringent hygiene standards and is permanently airtight.
- Fast delivery of ELGEF Plus couplers for prefabrication of bent sections.
- Active reinforcement of the ELGEF Plus couplers enables simple assembly, even with thin-walled, oval pipes.

### Your contact

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