

THE SPECIALISTS FOR AIR CONDUCTION



VENTAFLEX®
More efficiency in air conduction

Setting standards

in the air conduction technology



VENTAFLEX GmbH is the developer and producer of efficient, pre-insulated air duct systems, which are produced on the basis of PUR.

For over 35 years VENTAFLEX® products have been installed in – and under – great building complexes and industrial facilities. According to the modular system standard components are complemented with customized components if necessary. This way the perfect air conduction-solution is developed for every project.

The material makes the difference

Special feature of the product is the material: Polyurethane forms the core of the ducts – and is applied differently in the two product lines. Polyurethane has excellent insulating properties, therefore costly insulation work at the construction site is omitted.

VENTAFLEX® air ducts Classic for room – facade – roof

This air duct system is designed for the installation in rooms, on the roof or for the mounting on facades. The PUR material is additionally coated with a UV-resistant GRP layer.

LAVANTUS® air ducts for underground installation

is an air duct system specially developed for the underground installation with high stability. PUR material is processed to a closed-pored air duct in a patented Rotafusion Method.

Successfully tested

our certifications

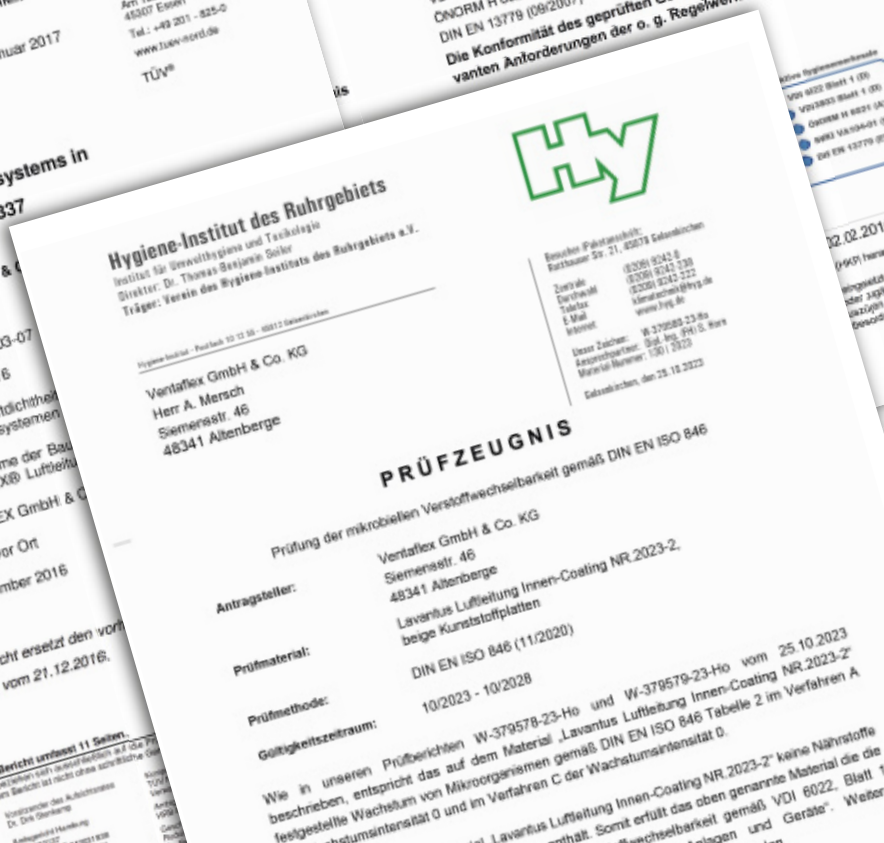
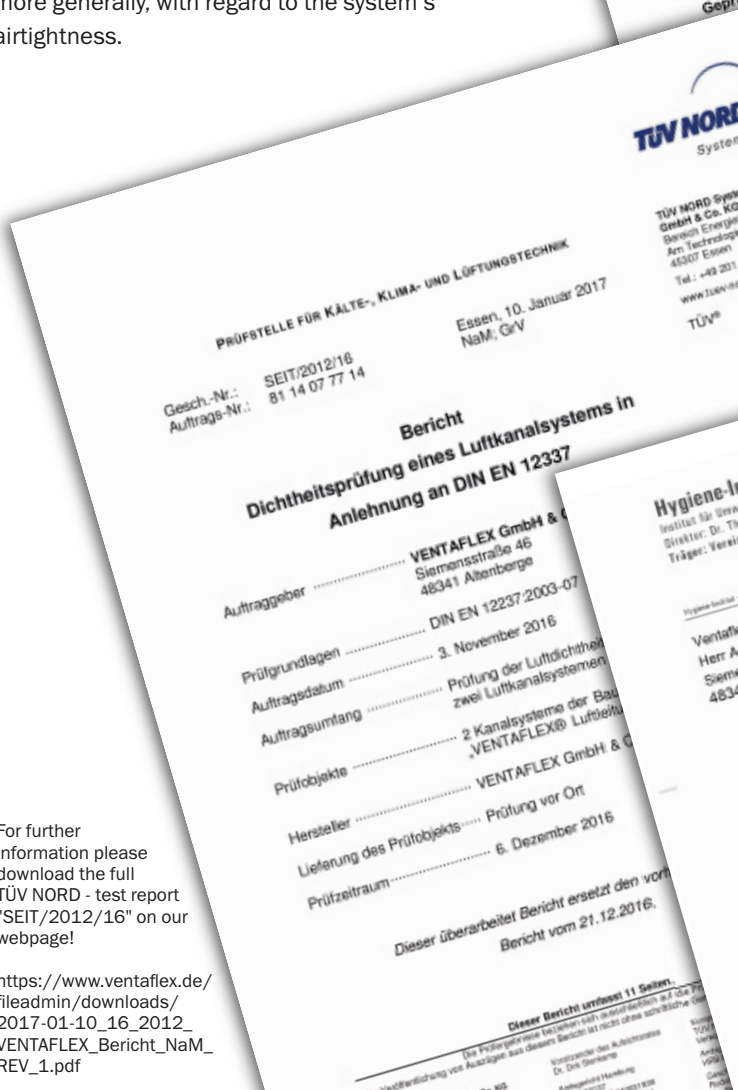
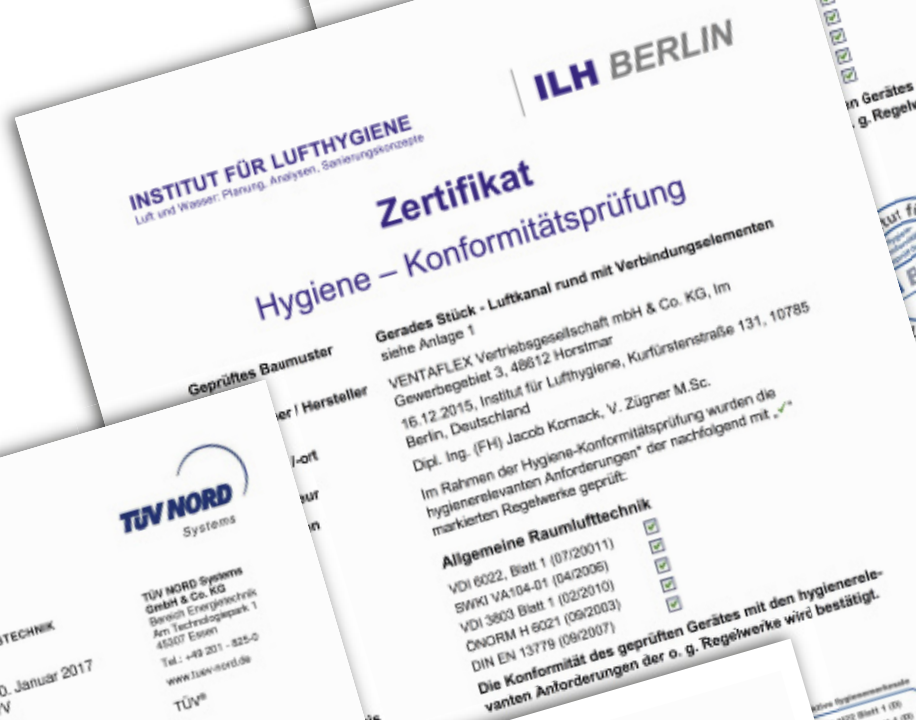
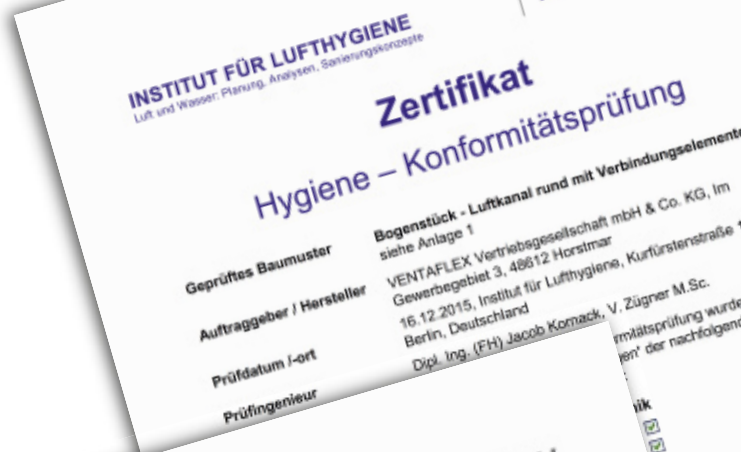
We face up to the test!

Whether VENTAFLEX® Classic or LAVANTUS® for underground installation: there is a "letter and seal" for the quality of the air ducts

Before being brought to market, VENTAFLEX® products must undergo extensive testing. After undergoing various in-house testing procedures, independent institutes are commissioned to test the ducts to the highest quality standards. Once again, it is the special properties of VENTAFLEX® air ducts that enable certification, both specifically in the hygiene sector and, more generally, with regard to the system's airtightness.

For further information please download the full TÜV NORD - test report "SEIT/2012/16" on our webpage!

https://www.ventaflex.de/fileadmin/downloads/2017-01-10_16_2012_VENTAFLEX_Bericht_NaM_REV_1.pdf



Ventilation solutions

for room – facade – roof

New construction or renovation – every building and consequently every ventilation project has different requirements. Especially high air consumption needs an optimal air conduction. The insulated VENTAFLEX® system proves its high flexibility in the most different areas of application time and time again. Particularly in those areas with very high demands on hygiene as well.

Air conduction in indoor areas

efficient and discreet

VENTAFLEX® air ducts Classic discreetly fit into every hall architecture for two reasons: thanks to the neutral colouring and the sustainably clean appearance. Even at great big temperature differences of the internal and external air no condensate, which causes corrosion and contamination, occurs with the highly insulated system.



Air conduction in outdoor areas

weather-resistant and light

Due to the temperature resistance of -40°C to +80°C VENTAFLEX® air ducts Classic are suitable for different weather conditions. Moreover the ducts are equipped with solid UV-protection. Another benefit: facades and roof are little loaded because of the low weight of the material.



Air conduction in the hygiene sector

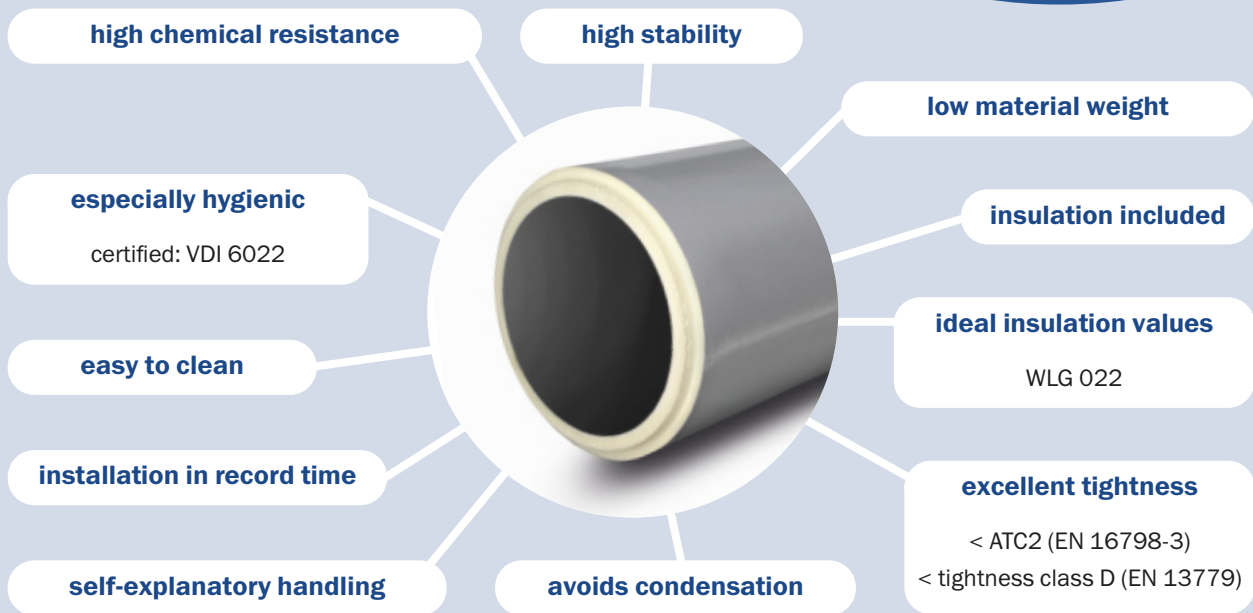
Certified hygienic

The VENTAFLEX® air ducts Classic secure highest hygienic standards especially due to the germ-resistant surfaces, avoidance of condensation to the greatest possible extent because of the exceptional insulation and the easy cleaning because of the smooth surfaces. LAVANTUS® air ducts for underground installation are also free from toxic biocides, fungicides and other coatings that are harmful to health.



At a glance:

The strength of the VENTAFLEX® air duct Classic system
for room – facade – roof



Measurable improvements compared to conventional, uninsulated spiral duct



energy
saving



less
pressure loss



less
leakage loss



less
weight



lower
assembly times

CONCLUSION: It all adds up!

The VENTAFLEX® system Classic saves energy + costs + time
= more efficiency in air guidance

LAVANTUS®

specially developed for the underground installation

To some extent the requirements for a duct for the underground air transport are different to air duct systems which are installed above ground. In order to meet the demands of these differences, we have developed a new patented production process to bring a brand new product to the market: the LAVANTUS® air duct especially for underground installation.



Federal Ministry
for Economic Affairs
and Climate Action

The successful LAVANTUS® concept:
At VENTAFLEX® the development
and implementation of new
technologies are recognized and
promoted by the Federal Ministry
of Education and Research



*The Rotafusion unit, developed
by VENTAFLEX®. The method is
patented and the product,
LAVANTUS®, is “made in Germany”.*

While underground installed air ducts generally have two benefits – they do not take any room in the building and are simply invisible – there are other aspects to consider. Thus the ducts should have great stability and be comfortably installed in the ground at the same time; here e.g. an easily-handled weight is an advantage.

An underground installed system has to work highly reliably, stay tight and clean. Here not only the material of the duct has to fulfill a special task, also the supplies (connecting clamps, wall ducts) have to be thoroughly chosen and tested.

With LAVANTUS® we have designed an air duct for the installation in the ground, which is exactly tailored to the special requirements and has an attractive effect on the cost structure of every construction project. The cost saving is also sustainable: great energy efficiency supports the contemporary economical operation of largely dimensioned AC systems.

At a glance:

benefits of the LAVANTUS® air duct installed underground

Stability

The Rotafusion Method produces a product with great stability: the ducts are robust against weight load and allow the installation even under traffic load

Insulation

The excellent insulation effect avoids condensate formation and saves energy costs

Material characteristics

Pure PUR is recyclable and free from toxic biocides, solvents, silicones and halogenated blowing agents

Cost efficiency

Best price-performance ratio of current systems on the market!
Clearly lower investment- and operation costs than for all alternatives

Tightness

Air ducts and connections stay reliably tight and are specially designed for the underground installation

Installation

The self-explanatory installation and the comparably low weight of the system allow a comfortable transport and a quick and cost-saving installation of the system

Hygiene

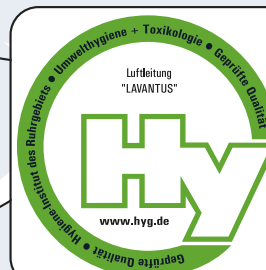
Smooth surfaces avoid that contamination sticks to them. There is no breeding ground for bacteria because condensate is avoided: VDI 6022-conform!

Cleaning

Easiest cleaning by broom and brush robot. Also the duct surface is resistant against industrial cleaning agents and disinfectants

LAVANTUS®

VENTAFLEX® air duct
for underground installation



Allgemeine Raumlufttechnik

- ✓ VDI 6022, Blatt 1 (01/2018)
- ✓ SWKI VA 104-01 (01/2019)

Hygiene-Konformitätsprüfung

W-385578-24-Ho

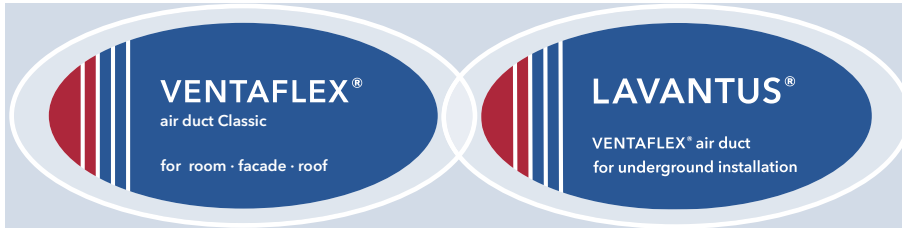
Gültigkeitszeitraum
03/2024 - 03/2029

Other features

- no toxic coatings
- free from toxic fungicides
- no expose sealants
- no zinc oxide coating
- particularly low in emissions
- no exposed sealing compounds
- no oil coating
- corrosion-resistant
- no abrasion at the usual air velocities

Components

Customized in-house production

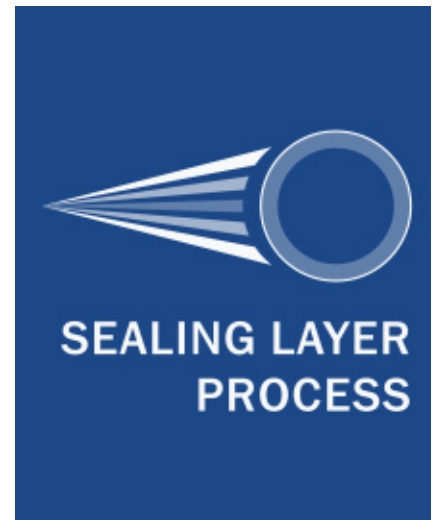


Developed by VENTAFLEX®

The final building block for complete on-site production

Systems with VENTAFLEX® air ducts are known to work perfectly in any application. Whether installed in new or existing buildings, VENTAFLEX® air ducts can be perfectly adapted to the technical and architectural conditions – thanks to individually manufactured special components.

VENTAFLEX® has developed a new surface finishing process especially for special components. This means that every custom-made product has the high resistance to chemicals, abrasion and weathering that characterizes all VENTAFLEX® air ducts. Our workpieces leave production with a smooth and even surface – good looks are also important to us!

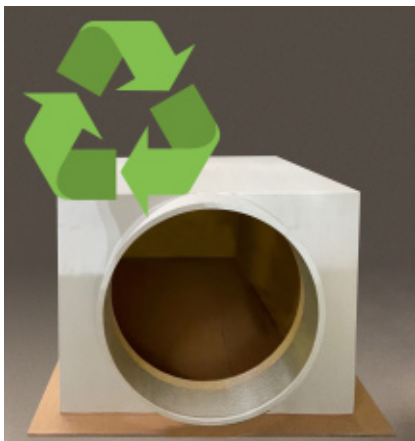


Everything from one source

Constant availability and on-time delivery

Complete production at the VENTAFLEX® site allows unbeatable time and quality management. The workpieces are completely manufactured by us without any detours and delivered to their place of use.

Your VENTAFLEX® contact person always has a direct influence on production and can therefore respond quickly to your needs: That is our service promise.



The highlight of the new process:

it makes it recyclable

Material purity was a goal on the way to even more sustainability. With the new finishing process, we have found a way to make the production of VENTAFLEX® air ducts more resource-efficient: sorted PUR residues are processed in order to be used as a starting material for the production of new components at VENTAFLEX®.

Active climate protection

due to tightness VENTAFLEX® air ducts

Climate protection is one of the big issues of this time.
One important aspect here are possible energy savings potentials.
At the VENTAFLEX® air ducts a number of effects are inseparably linked:
Ideal hygiene characteristics and effectiveness of the system guarantee
an economical operation which complies with the strict requirements –
and this with a good environmental conscience.

Avoid germ development ...

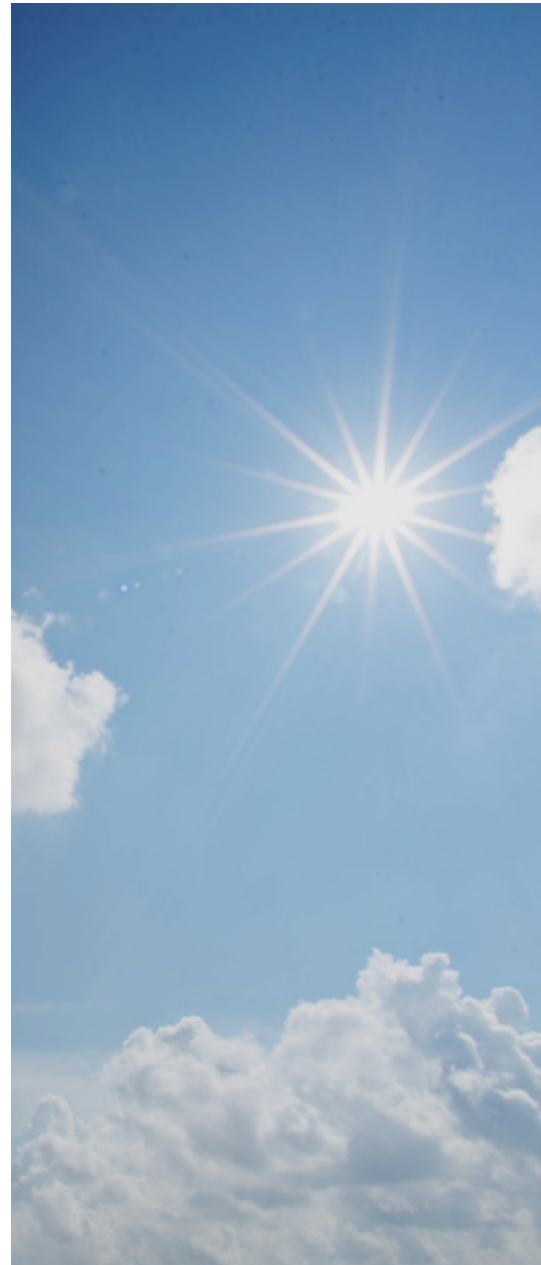
According to VDI 6022 Sheet 1, the avoidance of leaks and the prevention of unwanted moisture through ingress or condensation is essential for the supply air quality. All air ducts must be planned and designed in such a way that unintentional mixing of air is avoided. The tighter a duct system is, the more hygienic the air flow and therefore the more hygienic the supplied air.

... and save energy

At the same time, tightness is one of the most important aspects when it comes to energy efficiency. For example, a significantly lower fan power is required, which leads to noticeable savings in electricity and therefore operating costs.

The right decision for a good climate: the VENTAFLEX® system

Air ducts from VENTAFLEX® – both the Classik system above and LAVANTUS® below the floor slab - are an investment in the future in the face of sharply rising energy costs. So it is not only worth calculating when a well thought-out ventilation system will pay for itself in new buildings. A consistent decision in favor of modern technology is also quickly rewarded in old buildings undergoing refurbishment if the ventilation system works cleanly, energy-efficiently and trouble-free.



Detailed information

as up-to-date as our technology

Full knowledge about the material guarantees trouble-free operation of the processing and the perfect function in operation. A supreme discipline at VENTAFLEX® is the pinpoint consultation, which is coordinated with the particular project. If you would like this happens totally non-binding over our website – there you find the clearly sorted and always up-to-date information in our download area. It is worth visiting www.ventaflex.de regularly!



Special application

You would like detailed information about VENTAFLEX® products for the underground installation, the application in the hygiene- or food sector or in connection with a building renovation? Please contact us – we offer individual solutions for your special project requirement.

Current projects

We regularly document where, why and how VENTAFLEX® air ducts have been used in our Practise Reports on our website. On the basis of the described construction projects the flexibility of the system becomes apparent – in the section 'references' you certainly will find some application examples, which comply with your planned project.



Reliable partner

We take service personally

Good contact and trustworthy cooperation is the basis of our success. And we know with how much time pressure projects have to be realized. As a support we thus continuously expand our consulting- and service offer.



Individual implementation and delivery

- transparent calculation
- project-based production
- production of individual components
- support with construction site logistics

Intensive product consulting

Our specialists support you with your planning. We would like to present you the VENTAFLEX® products and system solutions, which are particularly suitable for your project.

Our service for planners:

You have access to many helpful planning tools on www.ventaflex.de:
3D drawings/ BIM library, calculation support and tender specifications.

Your contact person

Contact us! Please come up with questions and suggestions anytime.



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