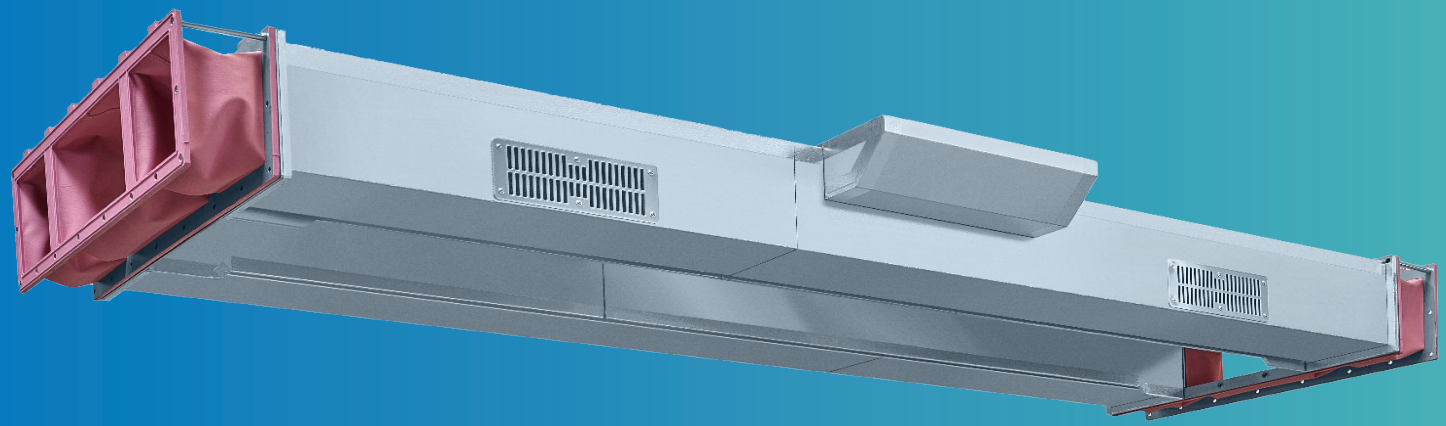
MöllerWerke

AIR DUCT SYSTEMS FOR THE RAILWAY INDUSTRY



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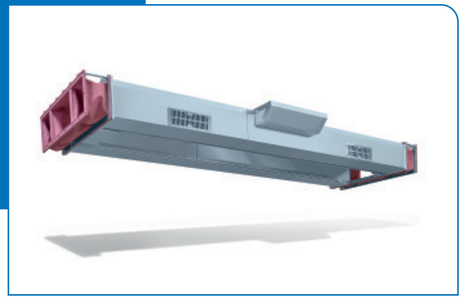
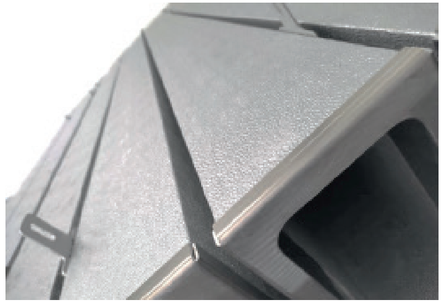
MöllerWerke

AIR DUCT SYSTEMS

HIGHLIGHTS

- Individually manufactured lightweight air duct systems
- Adaptable to any vehicle geometry
- Energy saving insulating material
- Possibility to expand the air duct system with MöllerWerke fabric expansion joints
- Certified according to international fire safety standards





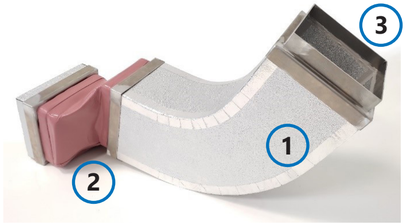
PRODUCT DESCRIPTION

Lightweight HVAC air duct systems provide uniform air circulation in air-conditioned passenger interiors. MöllerWerke offers complete air duct systems, which are manufactured individually according to customer requirements.

The 12 mm thick sandwich material, which has an insulating core, is made of PU foam laminated with aluminium foil on both sides. The air ducts made of lightweight fire-resistant fiber composite panels, on the other hand, are available in thicknesses from 4 mm to 20 mm. Both materials meet the fire protection standard according to EN 45545-2 and are also classified to R1/HL3.

Apart form that the air duct systems have a high adaptability to temperature fluctuations, as these have been developed for operating temperatures from -40 °C to +80 °C.

Material characteristics for sandwich material



1. Air duct made of sandwich material
2. Flexible molded part made of VMQ-silicone aramid fabric
3. Individual metal flange according to the connection geometry

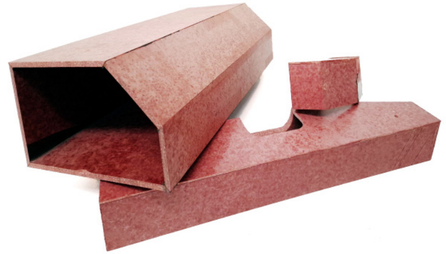
Material characteristics
- 12 mm sandwich material consisting of aluminium foil and PU foam
- Density of the sandwich: 60 kg/m³
- Thermal conductivity: λ 0,022 W / (mK)

Fire protection classes
- EN 45545-2
- R1 / HL3 classification

Resistance
- Resistance to cold -40 °C
- Cold-breaking temperature -50 °C
- Max. temperature +80 °C
- Resistant to microorganisms

Further standards
- DIN 6701 / EN 17460

Material characteristics for fiber composite panels



Material characteristics
- Density: 210 kg/m³
- Thermal conductivity: 0,042 W/(mK)
- Panel thickness from 4 mm to 20 mm

Fire protection classes
- EN 45545-2
- R1 / HL3 classification

Resistance
- Resistance to cold -40 °C
- Cold-breaking temperature -50 °C
- Max. temperature +80 °C
- Resistant to microorganisms

Further standards
- DIN 6701 / EN 17460

The air ducts are tested in the company's own test laboratory in accordance to EN 61373 after consultation with the customer. In addition, further tests can be organized according to international standards as well as customer-specific requirements.

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