AuRü PROJECT DIVISION

AuRü | Big Foot | Solflex

ONE COMPLETE SOLUTION FOR HVAC PROJECTS







AuRü safety and retention systems

CONTAINMENT & RETENTION

BIG FOOT® SYSTEMS

SUPPORT SYSTEMS

SOLFLEX Acoustic solutions

ACOUSTIC HOUSING

Clean environment.
Load management.
Quiet operation.

AuRü. Big Foot. Solflex.
Three leading manufacturers combine their expertise for projects within the refrigeration and air conditioning industry.

Modern project developments demand HVAC solutions that are unseen, unheard and environmentally intelligent. Delivering end-to-end HVAC projects that meet the highest standards of performance, compliance, acoustics & sustainability.

One plan. One schedule.
One point of contact.



AuRü
Auffang- und Rückhaltesysteme

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Acoustic solutions

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Let's talk about your project

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AuRü
safety and retention systems

ENVIRONMENTAL PROTECTION BEGINS, WHEN RESPONSIBILITY IS TAKEN.

Refrigeration and air-conditioning systems rely on substances that can be hazardous to water. Although leaks are rare, they can never be entirely prevented, making rapid and effective containment essential. AuRü's intelligent retention systems combine innovative technology and advanced sensors to provide dependable environmental protection.

- **Smart Environmental Technology – Detection of Glycol and Propane and oil retention**
- **Top quality from our own production facilities**
- **Operational safety • Legal compliance • Planning reliability**
- **Innovative and modular in design**
- **Individually planned and made to measure**
- **Compliance with german regulations & laws: WHG, AwsV & TRwS**
- **Retrofitting of existing machines**

CONTAINMENT AND RETENTION SYSTEMS

OIL PROTECTORS

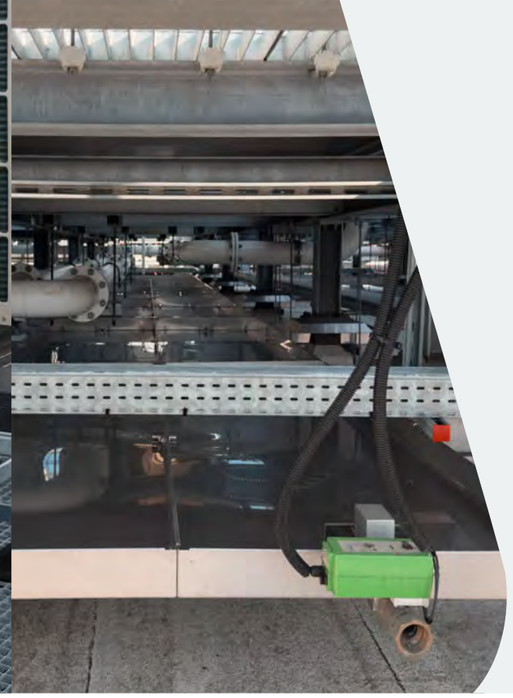
Our oil protectors with integrated oil separators ensure that light liquids such as ester oil are reliably collected and retained in the tray. The leaf guard protects against contamination, whilst our special heating technologies keep the tray free of ice.

Safe retention

Easy installation and maintenance

Ice-free thanks to optional heating technology





CONTAINMENT AND RETENTION SYSTEMS

GLYCOL PROTECTORS

AuRü glycol protectors set new standards in modern environmental protection: thanks to highly sensitive sensor technology, leaks are detected quickly and reliably.
In the event of an emergency, the valve closes automatically and safely contains the water-glycol mixture, whilst an alarm message is sent to the building management system.

Fast leak detection

Alarm sent to the BMS

Automatic valve closure

AN OVERVIEW OF OUR OIL PROTECTORS

BASIC
AuRü ÖP



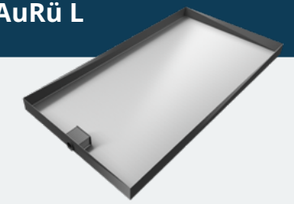
- ✓ Stainless steel collection tray
- ✓ Oil separator
- ✓ Leaf guard
- ✓ C-shaped feet (made of plastic or stainless steel)
- ✓ Tray height 35 mm
- ✓ Available in 10 standard sizes

PREMIUM
AuRü LC



- ✓ Stainless steel collection tray
- ✓ Oil separator
- ✓ Leaf guard
- ✓ C-shaped feet with mounting rails
- ✓ Tray height 80 mm
- ✓ Available in 6 standard sizes

PREMIUM – SPECIAL SIZES
AuRü L



- ✓ Stainless steel collection tray
- ✓ ARS80 oil separator
- ✓ Leaf guard
- ✓ Customised sizes

OUR QUALITY – YOUR SAFETY

TÜVNORD
TÜV NORD Systems GmbH & Co. KG
Fachbetrieb nach AwSV
tuev-nord.de

Deutsche Gesellschaft Qualitäts-Management ISO 9001 Reg.-Nr. 20220701 für Zertifizierung

Deutsche Gesellschaft Umwelt-Management ISO 14001 Reg.-Nr. 20220702 für Zertifizierung

Operationally, legally and planning reliable

In accordance with the WHG, AwSV and TRwS

Protection of soil and water bodies

AN OVERVIEW OF OUR GLYCOL PROTECTORS

BASIC
AuRü GP

- ✓ Stainless steel collection tray
- ✓ Combi drain (DN25/DN50)
- ✓ Leaf guard for combi drain
- ✓ AuRü Control-B2 control unit
- ✓ AuRü Drive valve
- ✓ Pressure sensor including 1/2" adapter
- ✓ Tray connection: hollow screws

PREMIUM
AuRü W

- ✓ Stainless steel collection tray
- ✓ Combi drain (DN25/DN50)
- ✓ AuRü Control-B2 control unit
- ✓ AuRü Fast-Drive valve with a closing time of 1 second
- ✓ Pressure sensor including 1/2" adapter
- ✓ Glycol sensor (various measuringprinciples)
- ✓ PE adapter for sensor protection with leaf guard
- ✓ Tray connection: NWL



YOUR BENEFITS

Environmental protection
Safe containment and retention of substances hazardous to water.

Smart technology
Fast and reliable leak detection.

Fast reaction
In an emergency, the valves close automatically and

System integration
Automatic alarm notification to the BMS.

Sturdy & durable
Top quality and well-designed modular components.

CONTAINTMENT AND RETENTION SYSTEMS

OIL AND GLYCOL PROTECTORS

We combine two protection systems in a single solution: a containment and retention system with an integrated oil separator wih intelligent sensor technology for reliable glycol detection.

Equipped with our well-established system features, this creates a high-performance all-rounder for maximum safety and reliable environmental protection – in accordance with WHG, AwSV and TRwS.

Fast leak detection

Alarm to the BMS

Automatic valve closure



AN OVERVIEW OF OUR GLYCOL PROTECTORS

BASIC
AuRü ÖGP

- ✓ Stainless steel collection tray
- ✓ Oil separator
- ✓ Leaf guard
- ✓ AuRü Control-B2 control unit
- ✓ AuRü Drive valve
- ✓ Pressure sensor incl. 1/2“ adapter
- ✓ Tray connection: hollow screws

PREMIUM
AuRü LW

- ✓ Stainless steel collection tray
- ✓ Oil separator
- ✓ Leaf guard
- ✓ AuRü Control-B2 control unit
- ✓ AuRü Fast-Drive valve with a closing time of 1 second
- ✓ Pressure sensor including 1/2” adapter
- ✓ Glycol sensor (various measuring principles)
- ✓ UFO adapter for sensor protection with leaf guard
- ✓ High-performance heating element
- ✓ Tray connection: hollow screws

CONTROL UNIT
Control-B2



- ✓ 2 sensor inputs
- ✓ IP66 protec-tion rating
- ✓ Graphic LCD display
- ✓ Adjustable alarm thresholds and response times for each measure-ment input
- ✓ Adjustable delay for alarm signals to the building management system
- ✓ Alarm log
- ✓ Potential-free contact

Deutsche Gesellschaft Qualitäts-Management ISO 9001 Reg.-Nr. 20220701 für Zertifizierung

Deutsche Gesellschaft Umwelt-Management ISO 14001 Reg.-Nr. 20220702 für Zertifizierung

TÜVNORD TÜV NORD Systems GmbH & Co. KG Fachbetrieb nach AwSV tuev-nord.de

SENSOR TECHNOLOGIES

GLYCOL DETECTION

Our innovative sensor technology for detecting glycol is high-performance, versatile and reliable. The patented technologies identifies problems at an early stage and prevents environmental damage before it occurs.



AN OVERVIEW OF OUR GLYCOL SENSING

01



Glycol-Sensor VAPOUR DIFFUSION SENSOR

- ✓ Detects even the smallest quantities of glycol particles
- ✓ Can be fitted directly in front of the tray drain
- ✓ **Suitable for AuRü GP, W, ÖGP, LW**

02



Glycol-Sensor-Contact CONDUCTIVITY SENSOR

- ✓ Conductance measurement with long-term stability
- ✓ Detects even the smallest quantities of the medium
- ✓ No risk of contamination from harmful gases or silicones
- ✓ Integrated temperature compensation and freeze detection
- ✓ **Suitable for AuRü GP, W, ÖGP, LW and pipework**

03



Glycol-Scanner ULTRASONIC SENSOR

- ✓ Ultrasonic measurement
- ✓ Reliably detects all types of glycol
- ✓ Integrated flow monitors and temperature and water sensors
- ✓ **Suitable for AuRü GP, W, ÖGP, LW**
- ✓ **Ideal for use in central monitoring systems, roof drainage, pump sumps, pipework systems and much more.**



SAFETY YOU CAN RELY ON.
All our glycol detectors are pressure independent and operate autonomously. We would be happy to advise you on the best solution for your project, depending on the location and application.

Retrofits

EXISTING FACILITIES SECURE FOR THE FUTURE

With our retrofit solutions, we bring existing HVAC-Systems up to current standards – efficiently, cost-effectively and, as a rule, without any downtime.

Made to measure
Tailor-made solutions

Legally compliant
By WHG, AwSV & TRwS

Cost-effective
Retrofitting is usually carried out whilst the system is in operation

NOTICE

Existing installations are not exempt from these regulations either. Whether it's a suspended installation or a recessed one – we'll find a suitable solution tailored to your needs.

REFERENCES

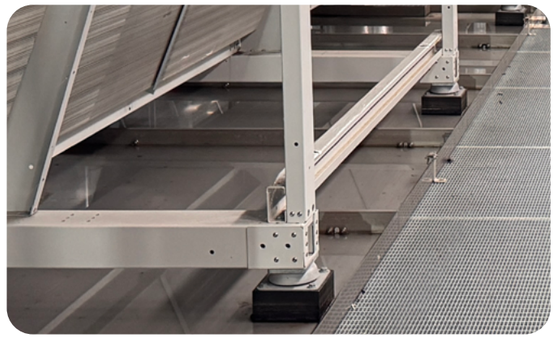





Assembly & Service

INSTALLATION SOLUTIONS DESIGNED AROUND YOUR PROJECT

By considering system design, available space and individual project requirements, we develop the most suitable installation solution for your application. Flexibly engineered, reliably delivered and fully integrated.



USE IN THE TRAY
Mounting base

- ✓ Easy installation directly into the tray
- ✓ Galvanic isolation guaranteed
- ✓ Overcomes the tray joint in multi-part systems
- ✓ Standard sizes and custom-made designs



UNDERNEATH CONSTRUCTION
Suspension – steel girder

- ✓ Suspension beneath steel girders
- ✓ The system can be fitted directly to the construction



UNDERNEATH INSTALLATION SYSTEM
Suspension - Big Foot System

- ✓ Suitable mounting brackets for our Big Foot Systems
- ✓ The trays can be easily fitted underneath the installation system

ASSEMBLY SERVICE

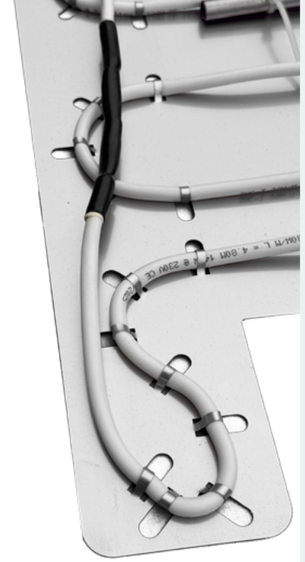
Our experienced installation teams will assist you with professional installation and commissioning, regular maintenance, and the prompt return and replacement of components.



HEATING TECHNOLOGIES

AURÜ HEATING SOLUTIONS

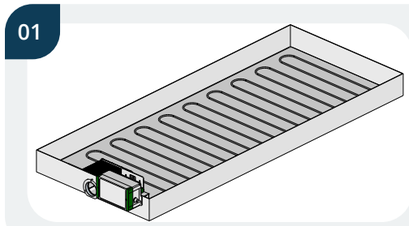
Depending on the heating system, our solutions can be installed on, in or beneath the tray to prevent ice build-up. With the AuRü surface heating system, the entire tray surface is heated for maximum protection.



- **Reliable frost protection**
- **Efficient & Energy-saving**
- **Perfectly Integrated**

AN OVERVIEW OF OUR HEATING SOLUTIONS

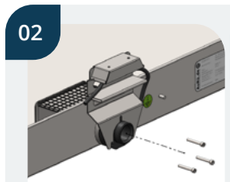
01



Surface heating (FLH) + Control-H1 control unit

- ✓ Heats the entire base area of the tray evenly
- ✓ Ice and water sensor, as well as a temperature sensor
- ✓ **Suitable for all AuRü standard trays**

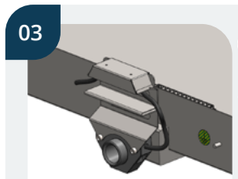
02



High-performance heating insert (HHE)

- ✓ Is inserted into the oil separator
- ✓ Low heat loss in the separator
- ✓ **Suitable for AuRü L, LW, ÖGP**

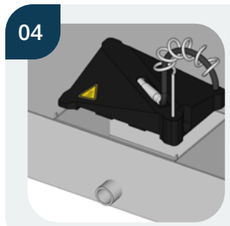
03



Combi-Drain-Heating

- ✓ Fits directly onto the drain
- ✓ Suitable for the AuRü combi drain
- ✓ **Suitable for AuRü W, GP**

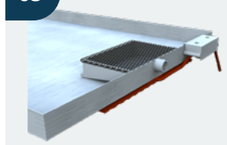
04



High-performance heating block (HHB)

- ✓ Is fed into the oil separator
- ✓ Leaf guard no longer required
- ✓ **Suitable for AuRü LC, ÖP**

05



Heating mat with thermostat

- ✓ To be glued underneath the oil separator
- ✓ **Suitable for all AuRü systems not subject to pressure**

HIGH PERFORMANCE SOLUTIONS

Our heating solutions are tailored to our systems and your requirements.

CONNECTION TECHNIQUES

AURÜ CONNECTION SOLUTIONS

Where a tray system consists of multiple sections, each section is securely joined to provide structural stability and enable the even distribution of precipitation across the entire system.



- **Minimising risk: Algae and Legionella growth**
- **Silicone-free, watertight and durable**

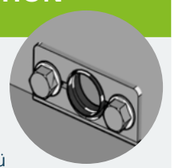
AN OVERVIEW OF OUR CONNECTIONS

STANDARD
HOLLOW SCREW



- ✓ Water level of approx. 15 mm
- ✓ Suitable for all AuRü collection and retention systems

BASIC
LWL-CONNECTION



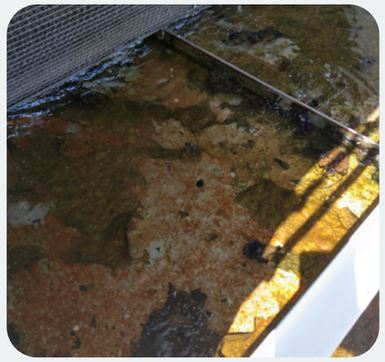
- ✓ Water level of approx. 5 mm
- ✓ Suitable for all AuRü containment and retention systems

PREMIUM
NWL-CONNECTION



- ✓ Water level of approx. 0 mm
- ✓ Suitable for all AuRü glycol separators, as the NWL is recessed into the tray

THE LOWER THE WATER LEVEL, THE GREATER THE BENEFITS.





- ✓ **Additional stability of the overall structure**
- ✓ **Consistent water level across the connected segments**
- ✓ **Minimisation of the risk of algae growth and potentially harmful Legionella bacteria**

AREAS OF APPLICATION

Our containment and retention systems are used in a wide range of installations and industries, including:

- Chillers (chilled water units), dry air coolers and heat pumps
- Outdoor air-conditioning units, split systems and condensers

Wherever oils or water-glycol mixtures are used and could leak in the event of a failure, our AuRü systems ensure reliable containment and thus therefore effective protection for the plant.

WE SECURE YOUR BUILDING

- Data centre
- Hospitals
- Automotive industry
- Airports
- Office buildings
- Industries and much more.



WE MAKE DATA CENTRES GREEN.

LEGAL CERTAINTY

Anyone who designs technical building systems bears a responsibility – to people, to the environment and to ensuring compliance with legal requirements.

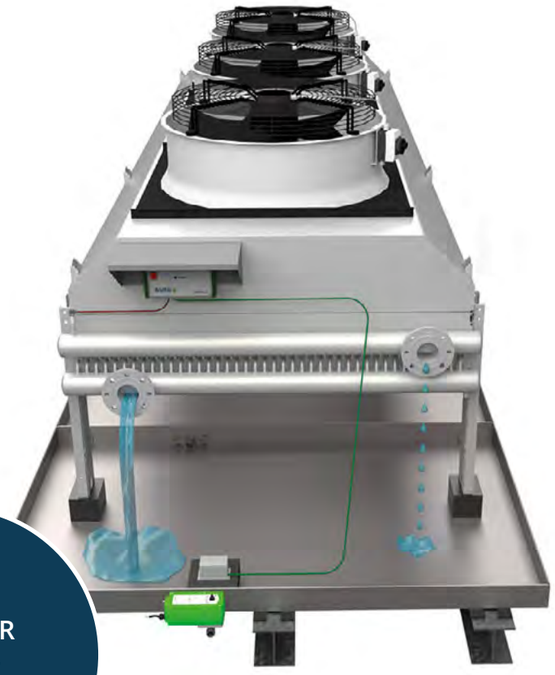
Legally compliant with german laws like WHG, AwSV & TRwS

Environmental protection for today & tomorrow

Identify risks, prevent damage, act safely

Our system solutions

- ✓ Containment & retention systems
- ✓ Sensors & monitoring
- ✓ Control technology
- ✓ Heating & connection technology



MONITOR
DETECT
HOLD BACK

Working together for greater legal certainty and environmental protection.

WE ARE HERE FOR YOU.

KNOWLEDGE CREATES SECURITY.

We offer training courses on the subject of legal compliance and our products for you and your team.

Gain a solid understanding of the legal requirements – practical, informative and always up to date.



Practical
Knowledge you can apply straight away to your business.

Competent
Experienced experts with hands-on experience.

Latest news
Always up to date.

For your team
Tailored training courses for you and your team.

OUR TRAINING TOPICS

- ✓ Current regulations, legislation and requirements for new builds and retrofitting existing buildings
- ✓ EU WFD (EU Water Framework Directive)
- ✓ German WHG (Water Resources Act)
- ✓ German AwSV (Ordinance on Installations for Handling Substances Hazardous to Water)
- ✓ German TRwS (Technical Regulations for Substances Hazardous to Water)

Target audience: Specialist planners, project managers and operators in the building services sector (refrigeration, air conditioning and heat pumps)



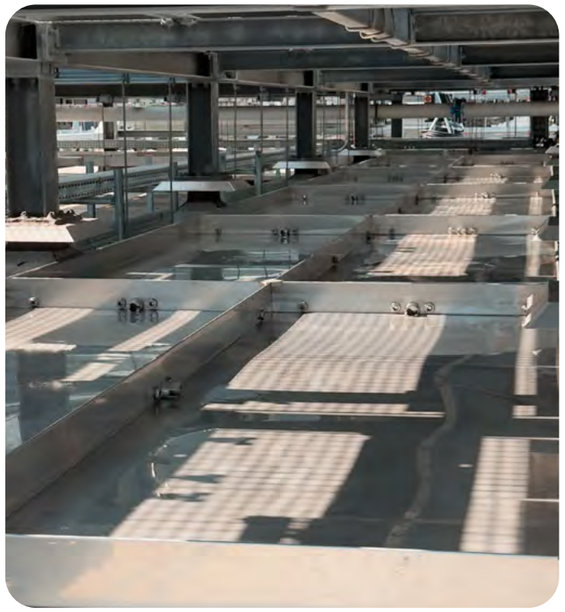
STUDY CASES

PROVEN SOLUTIONS IN PRACTICE.

AuRü systems are used in a wide range of systems, industries and sectors – they are reliable, safe and durable.

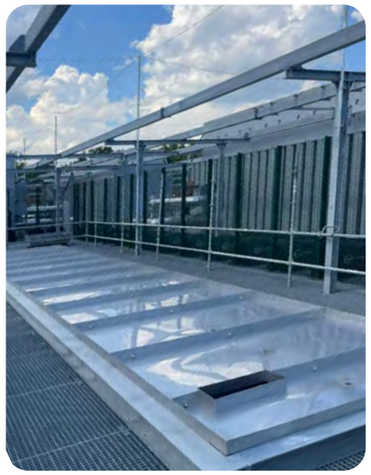






















THE GLOBAL LEADER IN NON-PENETRATIVE ROOFTOP SUPPORT SYSTEMS.

For over 30 years, Big Foot Systems has helped shape the rooftop support industry through innovative engineering and market-leading non-penetrative solutions. Trusted on thousands of projects worldwide, our systems provide safe, robust, and efficient support for plant, services, access requirements, and renewable technologies throughout the lifecycle of a building.

Combining technical expertise with a commitment to quality and continuous innovation, Big Foot Systems works closely with architects, consultants, contractors, and building owners to overcome complex rooftop challenges. From concept design through to installation, our engineered solutions help reduce risk, protect roof integrity, improve efficiency, and deliver long-term value on projects of every scale.

- 30+ Years Of Experience
- In-Depth Consultations
- Commitment To Quality
- Widest Range Of Products In The Industry
- Versatile & Fully Bespoke Systems
- Safe, Efficient, Easy To Install & Maintain

PLANT DECK SYSTEMS.

WHAT IS A PLANT DECK?

Plant Decks combine plant support, maintenance access, and screen support into a single integrated rooftop solution. By bringing these elements together, Plant Decks simplify project coordination, reduce installation time, and create a safer, more efficient environment for maintenance activities.

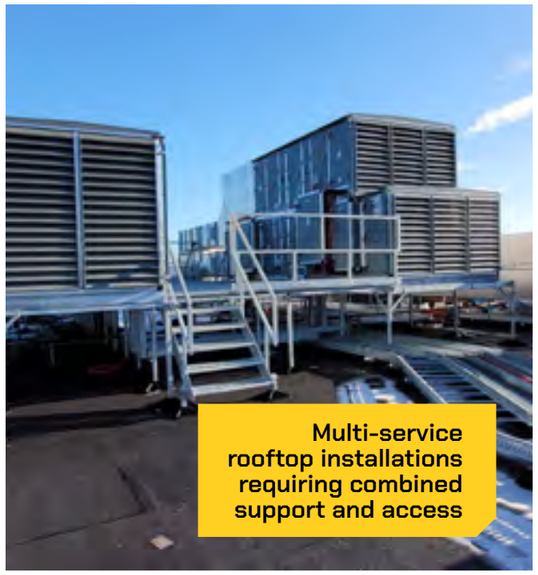
Utilising durable GRP decking and bespoke engineered support structures, each Plant Deck system is designed around the specific requirements of the project. The result is a streamlined rooftop solution that maximises usable space, improves operational efficiency, and protects the building envelope through a non-penetrative design.

Typical Applications:

- Plant support with integrated maintenance access and handrails
- Plant support with integrated screen support structures
- Rooftop HVAC, mechanical, and electrical equipment platforms
- Safe access routes around rooftop plant equipment
- Multi-service rooftop installations requiring combined support and access



Plant support with integrated maintenance access and handrails



Multi-service rooftop installations requiring combined support and access



Plant support with integrated screen support structures

Talk to our team today and get your project underway!



SCREEN SUPPORT SYSTEMS.

WHAT IS SCREEN SUPPORT?

Rooftop equipment often needs to be concealed without compromising roof integrity or maintenance access. Big Foot Systems' Screen Support solutions provide robust, free-standing structures designed to support architectural and acoustic screening while protecting the roof membrane through non-penetrative installation methods. Engineered to project-specific wind load requirements, each system delivers a safe, durable and visually appealing solution for rooftop environments.

From lightweight louvres to full acoustic enclosures, our bespoke screen support systems are designed to accommodate a wide range of screening applications and integrate seamlessly with rooftop layouts. The result is a flexible, future-ready solution that combines performance, practicality and aesthetics.

Typical Applications:

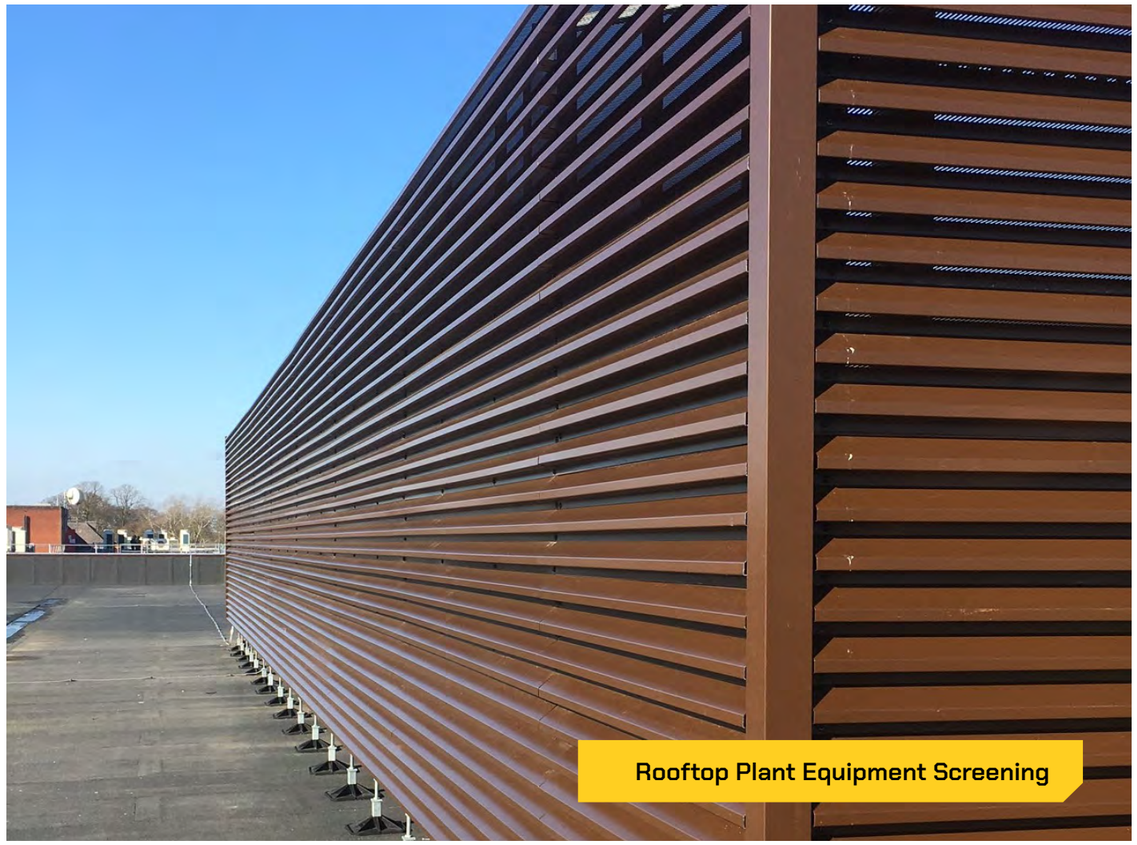
- Rooftop plant equipment screening
- Building services and pipework screening
- Acoustic screen and enclosure support
- Plant compound screening
- Refurbishment and retrofit projects
- Multi-level rooftop screening layouts



Plant compound Screening



Rooftop Plant Equipment Screening



Rooftop Plant Equipment Screening

Talk to our team today and get your project underway!

Case Study

APEX Tribecca, London

Working alongside VolkerFitzpatrick, Big Foot Systems designed and delivered a bespoke non-penetrative support solution for all rooftop M&E plant equipment, safe access systems and services on a challenging blue roof project. Through innovative engineering and precision manufacturing, the system met stringent load distribution requirements while protecting roof integrity and supporting efficient installation.

Support Systems Installed: Plant Support, Safe Access & Service Support

PLANT SUPPORT SYSTEMS.

WHAT IS PLANT SUPPORT?

Plant support is essential for safely mounting rooftop equipment while protecting the roof structure. Big Foot Systems provides non-penetrative support solutions for a wide range of mechanical plant, helping to distribute loads effectively whilst maintaining roof integrity.

Every rooftop presents different structural and layout challenges. Our engineered support systems are designed to suit the specific requirements of each project, whether supporting individual items of plant, accommodating concentrated loads or providing solutions for lightweight roof constructions where support locations are critical.

Typical Applications:

- Air Handling Unit (AHU) support
- Air Source Heat Pump (ASHP) support
- Chiller support
- Condenser and condenser bank support
- Generator and ancillary equipment support
- Point load distribution and management
- Multi-unit plant installations
- Mechanical and electrical plant support frameworks



Chiller Support



Multi Unit Plant Installations



Air Handling Unit (AHU) Support

Talk to our team today and get your project underway!

SAFE ACCESS SYSTEMS.

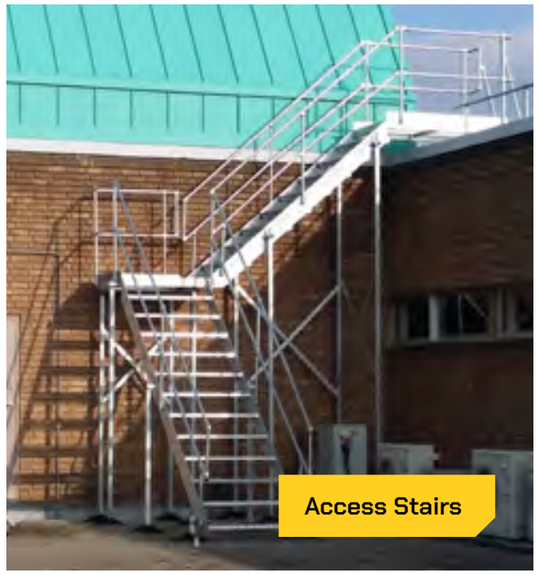
WHAT IS SAFE ACCESS?

Safe access is a key consideration on any rooftop, ensuring plant and equipment can be inspected, serviced and maintained efficiently. Big Foot Systems provides a range of non-penetrative access solutions that create safe routes around rooftop services and obstacles while protecting the roof membrane.

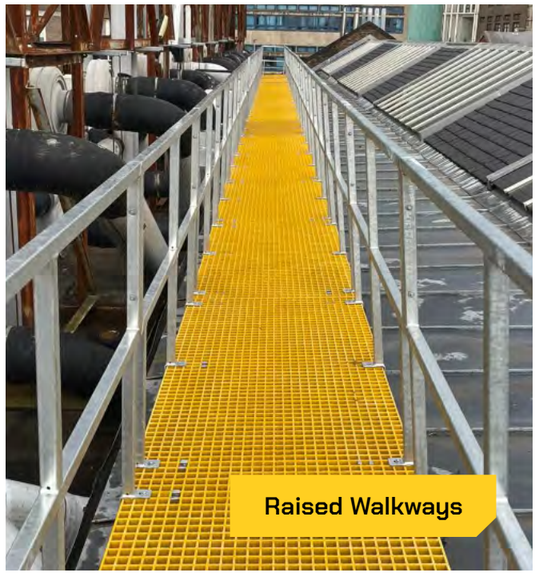
Every rooftop presents different challenges, which is why our systems are designed to suit the specific layout of each project. From simple walkway systems to more complex access arrangements, our solutions help create clear, practical routes for maintenance personnel without compromising roof integrity.

Typical Applications:

- Raised walkways
- Step-over platforms
- Access platforms
- Plant maintenance routes
- Ladder and access stairs



Access Stairs



Raised Walkways



Step-Over Platforms

Talk to our team today and get your project underway!

Case Study

Allen House, London

Big Foot Systems delivered a bespoke non-penetrative Plant Deck solution for the prestigious Allen House development in Kensington, providing safe and efficient support for rooftop HVAC equipment while protecting roof integrity. The lightweight modular system simplified installation, improved programme efficiency, and integrated seamlessly with architectural screening, creating a durable and visually discreet rooftop solution that complements the building's high-end design.

Support Systems Installed: Plant Deck

SERVICE SUPPORT SYSTEMS.

WHAT IS SERVICE SUPPORT?

Rooftop services are essential to modern buildings, but supporting pipework, ductwork and cable containment safely and efficiently requires careful consideration. Big Foot Systems' Service Support solutions provide a robust, non-penetrative method of supporting mechanical and electrical services whilst protecting the roof structure and simplifying installation.

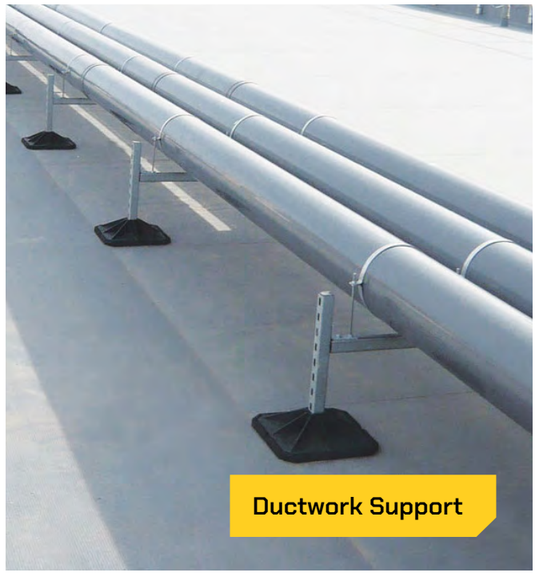
Designed for flexibility and ease of installation, our engineered support systems help contractors and building owners create structured rooftop service layouts that simplify maintenance, accommodate future expansion and maintain roof integrity throughout the life of the building.

Typical Applications:

- Pipework support systems
- Ductwork support systems
- Cable tray and cable containment support
- Mechanical and electrical service routes
- Multi-service rooftop installations



Cable Tray Support



Ductwork Support



Multi Surface Rooftop Installations

Talk to our team today and get your project underway!

SPECIFYING YOUR PROJECT WITH US.

Getting the support and access strategy right at specification stage reduces project risk, improves installation efficiency, and helps avoid costly design changes, programme delays, and unnecessary roof penetrations.

Big Foot Systems provides engineered, non-penetrative support, access, and plant deck solutions for rooftop mechanical, electrical, renewable energy, and building services applications. Designed to accommodate a wide range of equipment and infrastructure, Big Foot products help ensure safe, compliant, and efficient rooftop installations throughout the life of the building.

Specification Route

01 **Share The Project Details**
Send available roof plans, service layouts, loading information, access requirements and project constraints.

02 **Big Foot Reviews The Requirements**
Our technical team assesses support requirements, load distribution, wind considerations, and installation needs to develop the optimum support strategy.

03 **Review Your Support Proposal**
We provide coordinated layouts, support schedules, product recommendations, and supporting technical information for review.

04 **Include Within Tender Documentation**
Incorporate the agreed support design into project specifications and tender packages, helping contractors price accurately from the outset.

Specify the support strategy before it becomes a site problem!

WHAT INFO DO WE NEED?

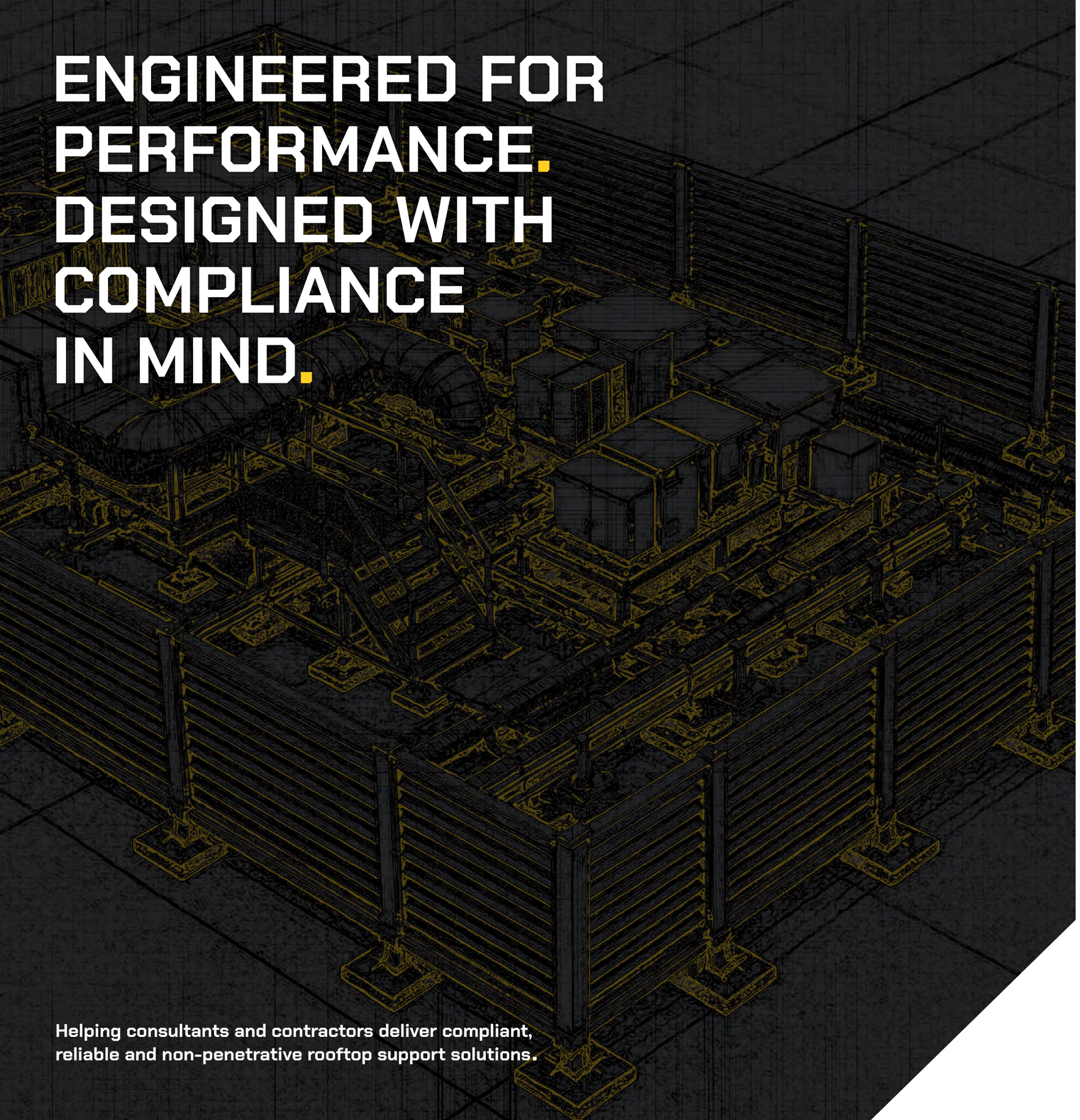
The more information provided, the faster our team can develop and recommend the correct support solution.

- ✓ Roof Construction Details
- ✓ Service Layout / Routes
- ✓ Available Drawings
- ✓ Equipment & Service Loads
- ✓ Access & Maintenance Zones
- ✓ Site Location & Wind Exposure
- ✓ Programme or Installation Constraints

Not all information is required at the outset.
Simply send what is available and our technical team will advise on any additional details needed to progress the support design.

Talk to our team today and get your project underway!

ENGINEERED FOR PERFORMANCE. DESIGNED WITH COMPLIANCE IN MIND.



Helping consultants and contractors deliver compliant, reliable and non-penetrative rooftop support solutions.

At Big Foot Systems, every support solution is developed with safety, performance and industry compliance at its core. Our non-penetrative rooftop support systems are engineered to accommodate system loads, environmental conditions and installation requirements, helping consultants, contractors and building owners specify with confidence.

Standards.

All Big Foot Systems solutions are designed and manufactured in compliance with Eurocode 1: Actions on Structures, Part 1-3 (Snow Loads) and Part 1-4 (Wind Actions), ensuring reliable performance across a wide range of environmental conditions.

- Eurocode 1: Actions On Structures
- Eurocode 1: Part 1 - 3 Snow Loads
- Eurocode 1: Part 1 - 4 Wind Actions

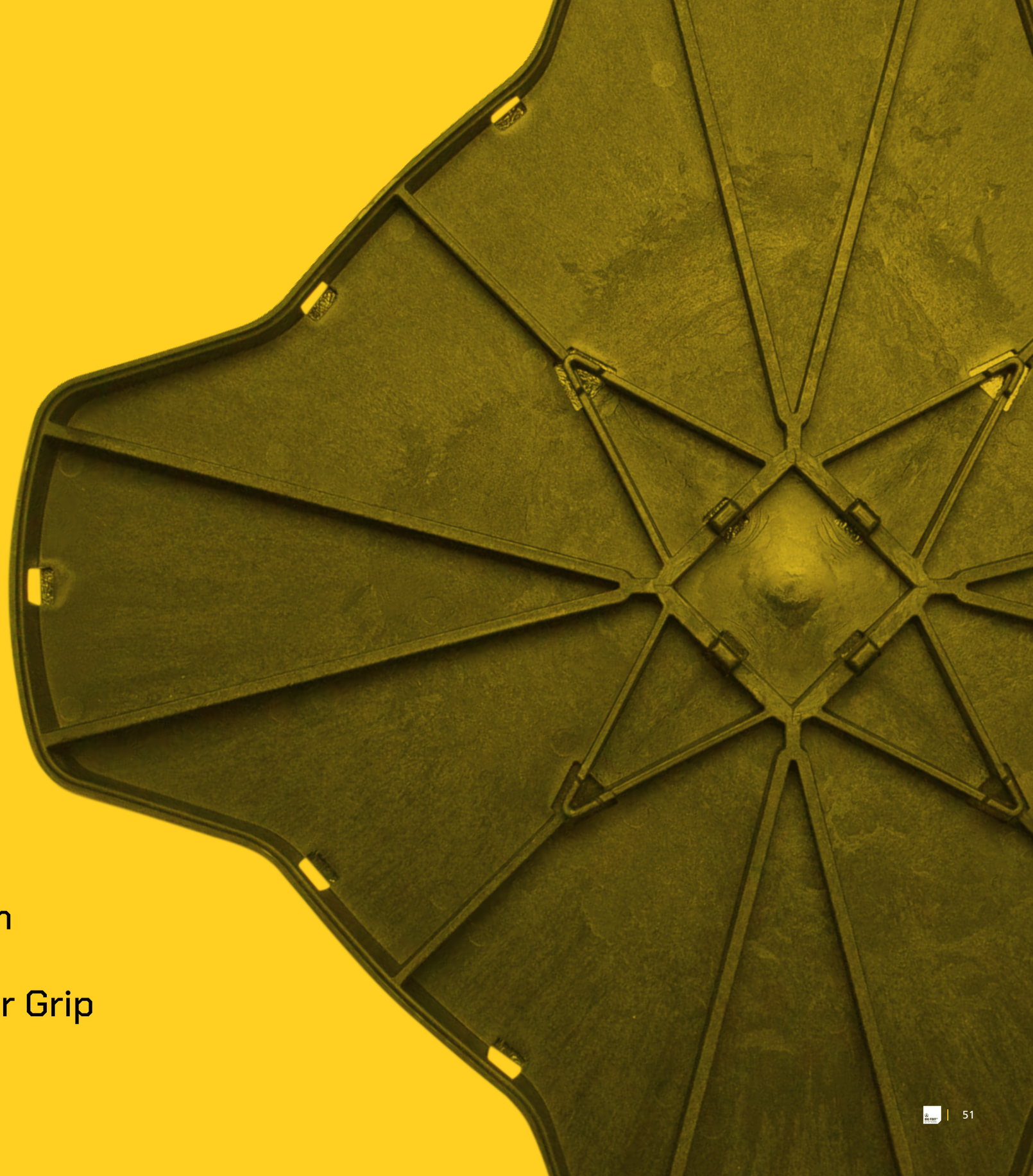
Why It Matters.

- Supports designed using recognised engineering principles
- Consideration of project-specific loads and environmental factors
- Reduced risk of rooftop damage and remedial works
- Improved specification confidence

BIG FOOT®
SYSTEMS

THE MOST ADVANCED FOOT DESIGN IN THE INDUSTRY.

- Patented Design
- Optimum Weight Distribution
- Higher Friction With Superior Grip
- Water Drainage Holes



SOLFLEX

Solflex acoustic housings are designed to reduce sound emissions of refrigeration, air-conditioning and heat pump units, to negligible soundlevels for neighbours and residents. Without limiting functionality.

- 25+ years of industry experience
- Noise reduction for all products certified to DIN EN ISO 3744
- Up to 28 dB(A) noise reduction
- Made in Germany
- Configurator enables instant calculation in under 1 minute
- Bespoke solutions
- Protected by Magnelis



PROJECT DETAILS (full load)*:
Chiller with 230kW cooling capacity,
69.408 m³/h air flow, 16 Pa pressure drop.

BEFORE LW(A):
92 dB(A)

AFTER LW(A):
69 dB(A)



*Note: @ part load conditions the sound reduction is significant higher and the pressure drop lower.





PROJECT DETAILS (FULL LOAD)*:
Chiller with 680kW cooling capacity,
231.476 m³/h air flow, 13 Pa pressure drop.

BEFORE LW(A):
92 dB(A)

AFTER LW(A):
71 dB(A)





Watch case study video

PROJECT DETAILS (full load)*:
Heat Pump with 640 kW heating capacity,
237.947 m³/h air flow, 23 Pa pressure drop.

BEFORE LW(A):
92 dB(A)

AFTER LW(A):
73 dB(A)





PROJECT DETAILS (full load)*:
Heat Pump with 300kW heating capacity,
81.248 m³/h air flow, 22 Pa pressure drop.

BEFORE LW(A):
92 dB(A)

AFTER LW(A):
74 dB(A)

*Note: @ part load conditions the sound reduction is significant higher and the pressure drop lower.

SOLFLEX

LABORATORY MEASUREMENT METHODS

The only solution on the market manufactured to the same exacting standards used by heat pump manufacturers — ensuring complete consistency, precision and compatibility.

MP1

Sound power measurement (MP1)
of the calibrated reference sound source over a spherical envelope with 12 microphones.

Acoustic data:
Class 2 according to DIN EN ISO 3744, as third octave spectrum and octave spectrum.

MP2

Sound power measurement (MP2)
of the Solflex acoustic enclosure with reference sound source inside the acoustic housing over a spherical envelope with 12 microphones.

Acoustic data:
Class 2 according to DIN EN ISO 3744, as third octave spectrum and octave spectrum.

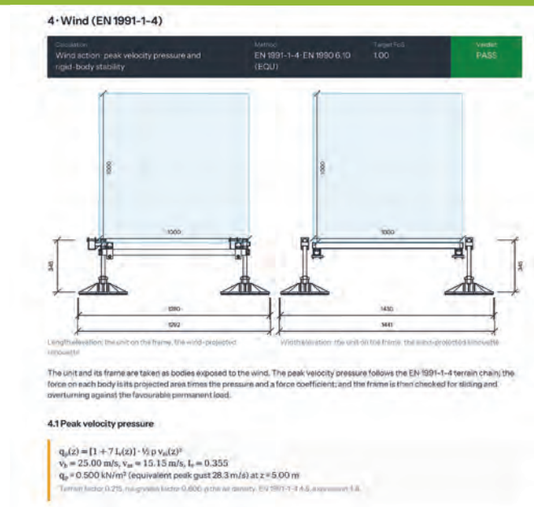
MP1-MP2 = sound level redcuction by acoustic housing*
The difference between the two measurements is the sound level reduction of the acoustic housing

FOR ADDED CONFIDENCE...

WIND LOAD CALCULATIONS

We also provide wind load calculations in accordance with EN 1991-1-4: General Actions – Wind Actions.

Technical assurance you need for every installation.



4 · Wind (EN 1991-1-4)

Calculation	Method	Target FoS	Verdict
Wind action: peak velocity pressure and rigid-body stability	EN 1991-1-4 · EN 1990:6.10 (EQU)	1.00	PASS

1000 1000 345 345 1390 1392 1430 1441

Length elevation: the unit on the frame, the wind-projected rectangle

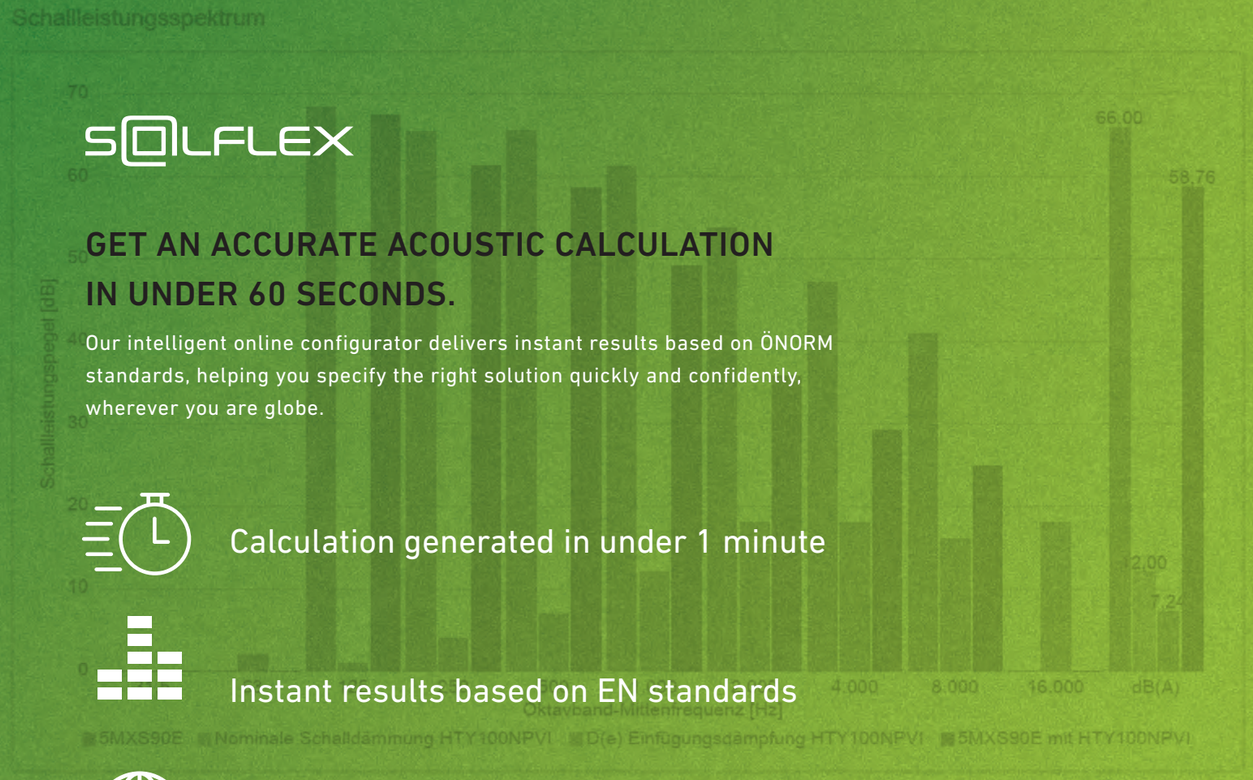
Width elevation: the unit on the frame, the solid-projected silhouette

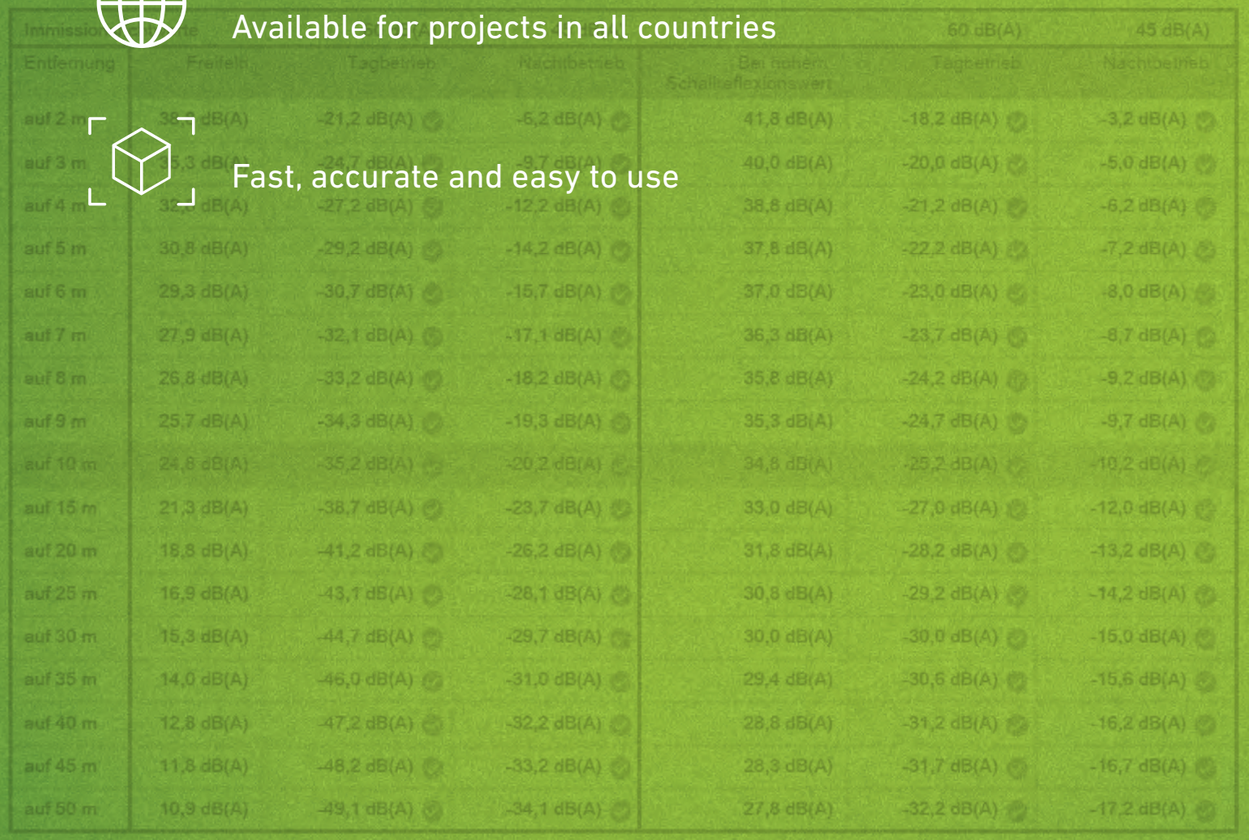
The unit and its frame are taken as bodies exposed to the wind. The peak velocity pressure follows the EN 1991-1-4 terrain chain; the force on each body is its projected area times the pressure and a force coefficient; and the frame is then checked for sliding and overturning against the favourable permanent load.

4.1 Peak velocity pressure

$q_p(z) = [1 + 7\,I_v(z)] \cdot \tfrac{1}{2}\,\rho\,v_m(z)^2$
$v_b = 25.00$ m/s, $v_m = 15.15$ m/s, $I_v = 0.355$
$q_p = 0.500$ kN/m² (equivalent peak gust 28.3 m/s) at $z = 5.00$ m

Terrain factor 0.215, roughness factor 0.600, ρ the air density. EN 1991-1-4 4.5, expression 4.8.





Immissionsorte		60 dB(A)		45 dB(A)	
Entfernung	Freifeld	Tagbetrieb	Nachtbetrieb	Tagbetrieb	Nachtbetrieb
		Bei nahem Schallreflexionswert			
auf 2 m	36,2 dB(A)	-21,2 dB(A)	-6,2 dB(A)	41,8 dB(A)	-18,2 dB(A)	-3,2 dB(A)
auf 3 m	35,3 dB(A)	-24,7 dB(A)	-9,7 dB(A)	40,0 dB(A)	-20,0 dB(A)	-5,0 dB(A)
auf 4 m	33,8 dB(A)	-27,2 dB(A)	-12,2 dB(A)	38,8 dB(A)	-21,2 dB(A)	-6,2 dB(A)
auf 5 m	30,8 dB(A)	-29,2 dB(A)	-14,2 dB(A)	37,8 dB(A)	-22,2 dB(A)	-7,2 dB(A)
auf 6 m	29,3 dB(A)	-30,7 dB(A)	-15,7 dB(A)	37,0 dB(A)	-23,0 dB(A)	-8,0 dB(A)
auf 7 m	27,9 dB(A)	-32,1 dB(A)	-17,1 dB(A)	36,3 dB(A)	-23,7 dB(A)	-8,7 dB(A)
auf 8 m	26,8 dB(A)	-33,2 dB(A)	-18,2 dB(A)	35,8 dB(A)	-24,2 dB(A)	-9,2 dB(A)
auf 9 m	25,7 dB(A)	-34,3 dB(A)	-19,3 dB(A)	35,3 dB(A)	-24,7 dB(A)	-9,7 dB(A)
auf 10 m	24,8 dB(A)	-35,2 dB(A)	-20,2 dB(A)	34,8 dB(A)	-25,2 dB(A)	-10,2 dB(A)
auf 15 m	21,3 dB(A)	-38,7 dB(A)	-23,7 dB(A)	33,0 dB(A)	-27,0 dB(A)	-12,0 dB(A)
auf 20 m	18,8 dB(A)	-41,2 dB(A)	-26,2 dB(A)	31,8 dB(A)	-28,2 dB(A)	-13,2 dB(A)
auf 25 m	16,9 dB(A)	-43,1 dB(A)	-28,1 dB(A)	30,8 dB(A)	-29,2 dB(A)	-14,2 dB(A)
auf 30 m	15,3 dB(A)	-44,7 dB(A)	-29,7 dB(A)	30,0 dB(A)	-30,0 dB(A)	-15,0 dB(A)
auf 35 m	14,0 dB(A)	-46,0 dB(A)	-31,0 dB(A)	29,4 dB(A)	-30,6 dB(A)	-15,6 dB(A)
auf 40 m	12,8 dB(A)	-47,2 dB(A)	-32,2 dB(A)	28,8 dB(A)	-31,2 dB(A)	-16,2 dB(A)
auf 45 m	11,8 dB(A)	-48,2 dB(A)	-33,2 dB(A)	28,3 dB(A)	-31,7 dB(A)	-16,7 dB(A)
auf 50 m	10,9 dB(A)	-49,1 dB(A)	-34,1 dB(A)	27,8 dB(A)	-32,2 dB(A)	-17,2 dB(A)

SOLFLEX

GET AN ACCURATE ACOUSTIC CALCULATION IN UNDER 60 SECONDS.

Our intelligent online configurator delivers instant results based on ÖNORM standards, helping you specify the right solution quickly and confidently, wherever you are globe.

- Calculation generated in under 1 minute
- Instant results based on EN standards
- Available for projects in all countries
- Fast, accurate and easy to use

START PLANNING YOUR SOLFLEX PROJECT TODAY!

We understand each project is different, so scan the QR code that is right for your project and find your perfect acoustic solution now.

Acoustic Housing

Most effective sound insulation in all directions.





Acoustic Screens

The simplest and most affordable soundproofing in a specfic direction





Custom

Tailor made to your project needs. Get in touch.





SOLFLEX

Customise housing in any colour or finish to seamlessly complement its surroundings. Without compromising performance.

Colours that blend with your environment



Choose from 5 finishes

Magnelis | RAL7016 | RAL7035 | RAL9006 | RAL9010

Simply add the below code to the end of the model number when ordering.

V = Magnelis and aluminum frame construction
RAL7016 = Galvanized steel in RAL7016 anthracite grey powder-coated and aluminum frame construction
RAL7035 = Galvanized steel in RAL7035 light grey powder-coated and aluminum frame construction
RAL9006 = Galvanized steel in RAL9006 white aluminium powder-coated and aluminum frame construction
RAL9010 = Galvanized steel in RAL9010 pure white powder-coated and aluminum frame construction

Your project.
Your style.
Your colour.
Your finish.
Your way.
The Solflex difference.



H, HT, SHT, XHT, XH

HORIZONTAL CABINS

Standard and Custom. Acoustic enclosures **up to 20 dB(A) sound reduction**, measured according to DIN EN ISO 3744

- Designed to reduce the noise emissions of refrigeration, air conditioners and heat pumps without compromising functionality
- Ingenious intake and exhaust air separation for optimum efficiency of the built-in outdoor unit
- Easy installation
- Service and maintenance access possible
- Protection against the weather and vandalism
- Can be adapted in colour to the environment



HT12



HD 6 dB(A)



HT 12 dB(A)



HM 13 dB(A)



HTS 14 dB(A)



SHT 18 dB(A)



H 18 dB(A)



XHT 20 dB(A)



XH 20 dB(A)

SOUND INSULATION SHT ACOUSTIC HOUSING

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000	16000
Sound insulation dB(A)	3,0	5,0	6,0	14,0	18,0	23,0	21,0	21,0	23,0

Entire cabin range

Any unit any colour!
Colours can be adpated to suit your environment



Magnelis | RAL 7016 | RAL 7035 | RAL 9006 | RAL 9010

V, XV, SQV, XQV RANGE

VERTICAL CABINS

All Custom. Acoustic enclosures **up to 28 dB(A) sound reduction**, measured according to DIN EN ISO 3744

- All custom made
- Designed to reduce the noise emissions of refrigeration, air conditioners and heat pumps without compromising functionality
- Ingenious intake and exhaust air separation for optimum efficiency of the built-in outdoor unit
- Service and maintenance access possible
- Protection against the weather and vandalism
- Can be adapted in colour to the environment





V 19 dB(A)



XV 23 dB(A)



SQV 25 dB(A)



XQV 28 dB(A)





SOUND INSULATION SQV ACOUSTIC HOUSING

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000	16000
Sound insulation dB(A)	5,1	7,8	18,6	24,1	24,4	24,9	27,1	26,5	23,3

Entire cabin range

Magnelis | RAL 7016 | RAL 7035 | RAL 9006 | RAL 9010

Any unit any colour!
Colours can be adpated to suit your environment



SDW, SGV, DGF, SGF

ACOUSTIC SCREENS

Simple and cheapest solution for sound problems in a certain direction; available in any desired size

- Designed to reduce the noise emissions of refrigeration, air conditioners and heat pumps without compromising functionality
- Ingenious intake and exhaust air separation for optimum efficiency of the built-in outdoor unit
- Easy installation
- Service and maintenance access possible
- Protection against the weather and vandalism
- Can be adapted in colour to the environment





SDW 50mm
Rw 25 dB

SDW 100mm
Rw 27 dB

Measured according to
EN ISO 10140-2:2010



SGF 140mm
Rw 9 dB

SGF 300mm
Rw 16 dB

Measured according to
EN 15186-1-3:2011



DGF 280mm
Rw 14 dB

DGF 600mm
Rw 22 dB

Measured according to
EN 15186-1-3:2011

SPLITTER, MODULAR, CICRCULAR

SOUND ATTENUATOR

Reduce noise from condensers, chillers, heat pumps and HVAC systems. Helping create quieter, more comfortable environments.

SPLITTER SILENCER
- Silencer with built-in backdrops and aerodynamically profiled frame, measured according to DIN EN ISO 7235

CIRCULAR SILENCER
- Circular silencer with insertion loss, measured according to DIN EN ISO 7235. High acoustic effectiveness due to built-in core. Optimised to reduce the pressure difference on the inflow side with a streamlined dome.

MODULAR SILENCER
- Worldwide patented modular silencer MSD to solve sound problems in ventilation systems efficiently and almost without building costs.





SPLITTER
20 up to 30 dB
sound reduction





CIRCULAR SILENCER
10 up to 20 dB
sound reduction





MODULAR SILENCER
Sound reduction = project based

Worldwide Patented



DESIGN, MANUFACTUR & INSTALL

All made to measure, bespoke, installation,
a complete, hassle-free service: from design
and manufacture right through to installation.

Talk to us today!

If we can house it, we can reduce the sound!

- Heat pumps
- Refrigeration systems
- Chillers
- Dry coolers or condensers
- Special technical devices
- Built-in technical fittings
- Special sound insulation for certain frequencies
- Isolators for efficient vibration isolation or decoupling of structure-borne noise







SOLFLEX

SOLFLEX

DID YOU KNOW?

Our acoustic solutions are standard manufactured in Magnelis.

Magnelis is a premium metallic coating for steel, made from zinc, aluminium, and magnesium to provide exceptionally durable surface protection.

It offers at least **three times better corrosion resistance than conventional galvanized steel** in outdoor applications, helping extend the product's service life.

Its **self-healing effect protects cut edges and minor scratches**, which is especially valuable for fabricated products such as heat-pump enclosures.

Magnelis performs particularly well in **demanding outdoor environments**, including exposure to moisture, chlorides, and ammonia.

For the customer, this means long-lasting design appearance, reduced maintenance, reliable protection, and an economical alternative to stainless steel.

Superior quality.
Built to last.
Keeps looking good.
The Solflex difference.



AuRü PROJECT DIVISION

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part of ASPEN PUMPS GROUP

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