



Specialist acoustic solutions
for HVACR units.



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)



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)



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)



Watch case study video



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



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.

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 reduction by acoustic housing*

The difference between the two measurements is the sound level reduction of the acoustic housing

FOR ADDED CONFIDENCE...

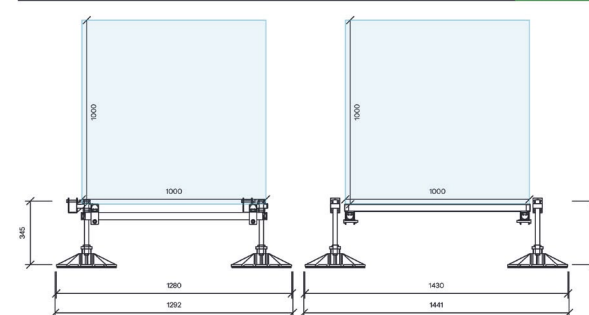
WIND LOAD CALCULATIONS

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)

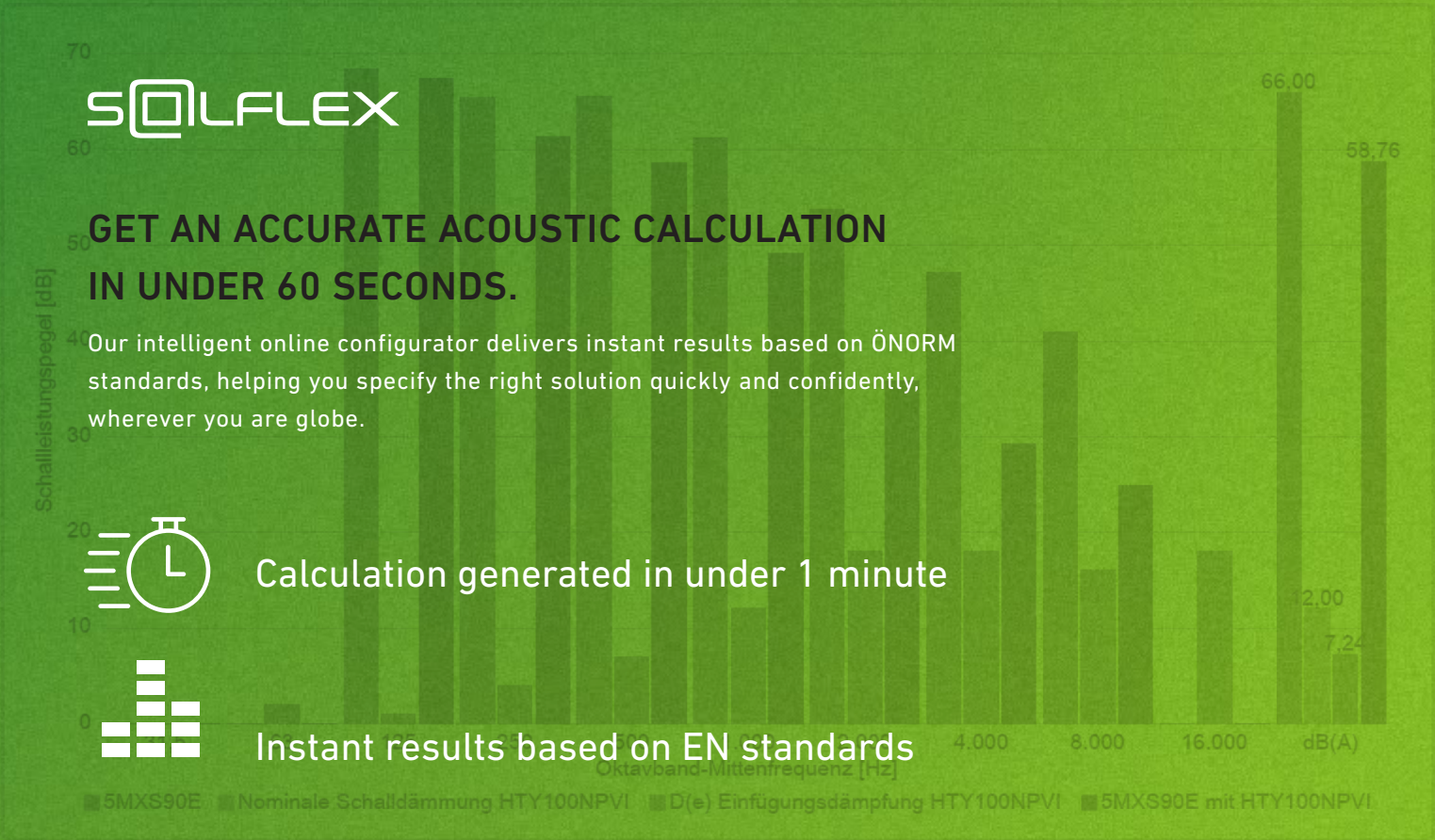
Calculation: Wind action peak velocity pressure and rigid body stability	Reference: EN 1991-1-4: EN 1990 6.10 (ECU)	Target F _{0,3} : 1.00	Verdict: PASS
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The unit and its frame are taken as bodies exposed to the wind. The peak velocity pressure follows the EN 1991-1-4 terrain class; 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

$q_{p,0}(z) = [1 + 7 I_{z,0}(z)] \cdot \frac{1}{2} \rho V_{0,0}(z)^2$
 $V_0 = 25.00 \text{ m/s}$, $V_{0,0} = 15.15 \text{ m/s}$, $I_{z,0} = 0.355$
 $q_{p,0} = 0.500 \text{ kN/m}^2$ (equivalent peak gust 28.3 m/s) at $z = 5.00 \text{ m}$
 Terrain factor 0.215, roughness factor 0.606; ρ the air density, EN 1991-1-4 4.5, expression 4.8.



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

Immission Entfernung	60 dB(A)			45 dB(A)		
	Freifeld	Tagbetrieb	Nachtbetrieb	Bei hohem Schallreflexionswert	Tagbetrieb	Nachtbetrieb
auf 2 m	35,1 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) ✓	-8,7 dB(A) ✓	40,0 dB(A)	-20,0 dB(A) ✓	-5,0 dB(A) ✓
auf 4 m	32,1 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) ✓

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 specific direction



Custom

Tailor made to your project needs. Get in touch.



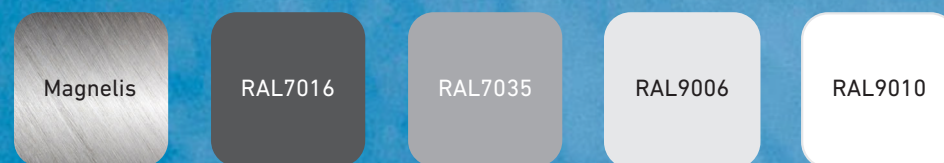


Customise housing in any colour or finish to seamlessly complement its surroundings. Without compromising performance.

Colours that blend with your environment



Choose from 5 finishes



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)

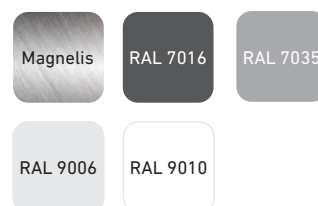
SOUND INSULATION SHT ACOUSTIC HOUSING

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 adapted to suit your environment

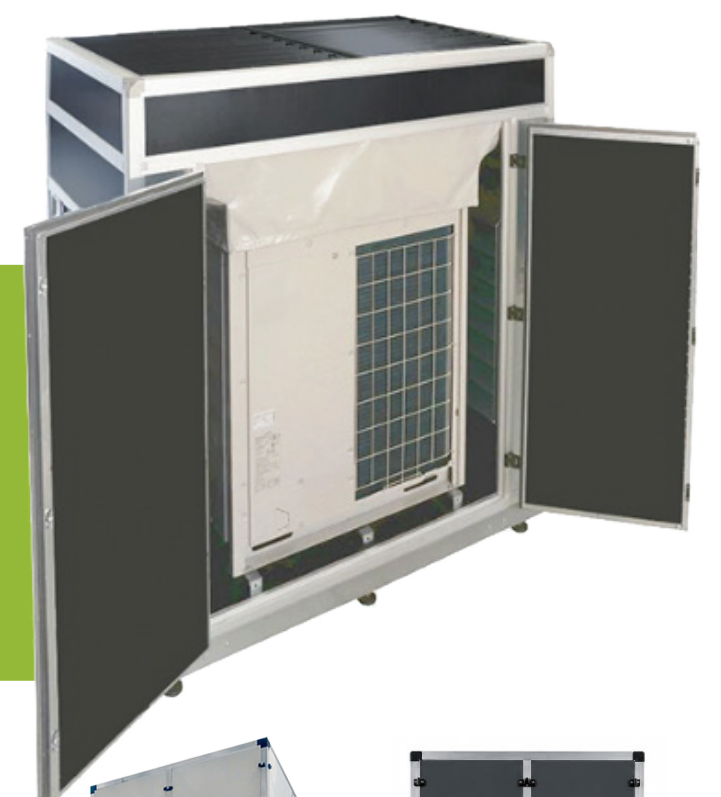


V, XV, SQV, XQV RANGE

VERTICAL CABINS

All Custom. Acoustic enclosures **up to 20 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

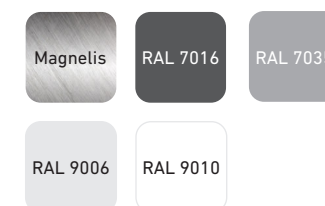
Frequency (Hz)	63	125	250	500	1000	2000	4000	8000	16000
Sound insulation dB(A)	5,1	7,8	18,6	24,1	24,4	24,9	27,1	26,5	23,3



Entire cabin range



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

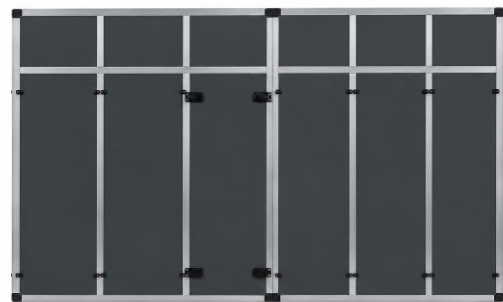


SDW, SGV, DGF, SGF

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, CIRCULAR

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.

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

Talk to us today!



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.

SOLFLEX

solflex.eu

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AuRü PROJECT DIVISION



AuRü



Big Foot



Solflex

part of **ASPEN PUMPS GROUP**