



EXECUTED PROJECTS:
Photovoltaic noise barriers road A1

- Installation was carried out over a single night shift
- Total power installed 20,7 kWp
- Optimizers used in the shadow area
- Over 12 months of operation generated 13,5 MWh
- Relative effectiveness estimated 650 kWh/kW/year

STALCORP is an engineering and project delivery company operating in the Scandinavian infrastructure sector since 2015.

Rooted in Nordic precision, we deliver reliable, technically sound solutions for bridges, complex steel structures, and road and railway infrastructure. Trusted since 2015, we've earned our place through a combination of proven expertise, smart execution and a clear focus on what matters most: lasting quality, delivered with precision.

We specialise in projects that require custom engineering, technical supervision, quality control and timely installation. Our in-house team combines project management, design and engineering expertise to ensure clear processes, accurate execution and dependable delivery.

We also develop our own certified products, including CE-marked noise barrier systems for roads and railways, designed for durability, performance and architectural variety, with both standard and project-specific options available.

STALCORP stands for structural clarity, technological fluency and agile, trustworthy delivery — engineering solutions built to meet the evolving needs of modern infrastructure.

STALCORP
Engineered to Adapt. Built for What's Next.

UAB STALCORP
Vilnius: Senasis Ukmergės kel. 4, Užubaliai. Vilnius r.
Kaunas: Jovarų g. 2A, Kaunas

Phone: +370 (685) 08 397
E-mail: info@stalcorp.eu
stalcorp.eu

Photovoltaic Noise Barriers

STALCORP

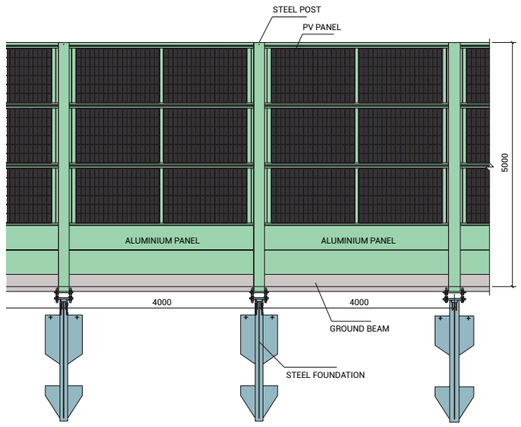


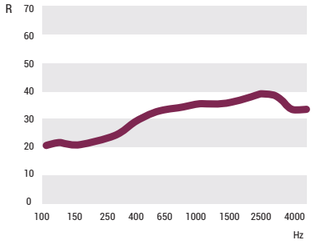
A future-proof solution that delivers both quiet and power.

Photovoltaic Noise Barriers (PVNBs) unite two essential functions in one smart system: **reducing traffic noise and producing clean solar energy.** Built as certified noise-barrier structures enhanced with integrated PV panels, they offer sound insulation, optional sound-absorption capacity, and seamless compatibility with existing barrier designs.

Photovoltaic Noise Barrier Key Figures

- Compatible with noise barriers from 2.5 to 7.0 metres in height.
- 1 km of PVNB can host 750–2,500 PV modules (1–5 modules per row), xdelivering 0.33–1.08 MW of installed capacity.
- Annual energy output ranges from 250 to 860 MWh.
- Vertical, dual-sided PV panels ensure efficient generation in all four directions





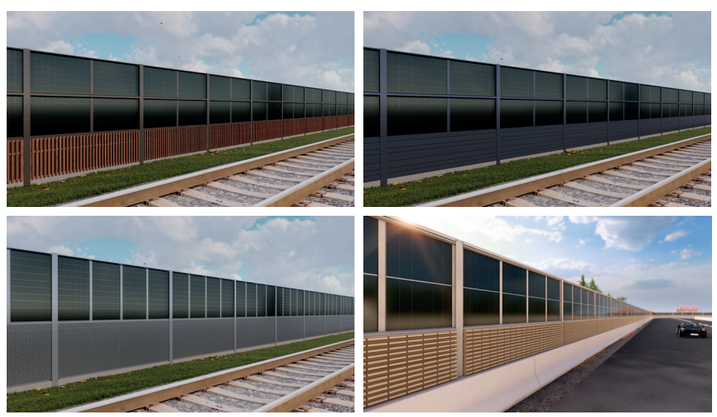
EN 1793-2:2019
DL_R= 30 dB
U=3 dB (95%)

Frequency f (Hz)	Ri
100	20,1
125	21,5
160	20,6
200	21,5
250	23,0
315	25,6
400	29,7
500	31,9
630	33,6
800	34,5
1000	35,5
1250	35,9
1600	36,3
2000	37,4
2500	38,8
3150	38,6
4000	33,2
5000	33,8

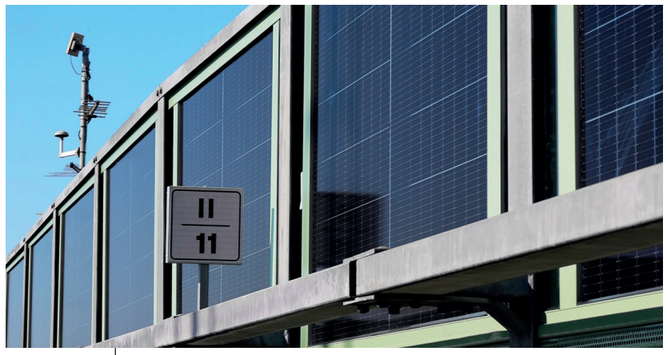
Parameter	Standard	Value
Airborne sound insulation	N 1793-2	DL_R=30 dB
Airborne sound insulation (in-situ)	N 1793-6	$DL_{SI,G}$=36 dB
Airborne sound insulation (in-situ)	EN 16272-6	$DL_{SI,G}$=38 dB

Possible combinations

- With timber barriers
- With aluminum barriers
- With transparent barriers
- Different material and architectural options







EXECUTED PROJECTS:
Photovoltaic noise barriers in Italy
- Pilot project consists of 45 pcs. PVNB segments
- Glass-glass modules type "Bifacial" was used
- Total power installed 19,5 kWp
- Fully integrated into existing noise barrier on the viaduct

EXECUTED PROJECTS:
Photovoltaic noise barriers on railroad Kyviškės – Valčiūnai
- Installation was carried out in 2 railway windows, 4 hours each
- Total power installed 22,2 kWp
- Over 12 months of operation generated 16,8 MWh
- Factual generation exceeded theoretical model by 20%
- Actual relative effectiveness 750 kWh/kW/year
- Field tests of noise levels confirms compliance to the standards
- Tested in real life conditions on electrified railway line



Tested, Certified, CE Marked

Our PV noise barriers are fully integrated into the standard noise-barrier range, designed to fit any project without changing its structural concept. (They meet all key European requirements:)

- Acoustic performance tested to EN 1793-1 and EN 1793-2
- In-situ testing in accordance of EN 1793-6
- Load-bearing and mechanical tests in accor dance with EN 1794-1 and EN 1794-2
- Declaration of Performance (DoP) and CE marking under EN 14388

We use high-quality solar modules from Solitek, a trusted Lithuanian manufacturer of solar modules and batteries.

Solar Modules for PV Noise Barriers: SOLID Bifacial — our benchmark for durability and long-term performance.

