OLSON Acoustics

Rail & Road Noise Barrier

Sound absorption system for railway, roadway, and other industrial noise sources.

Importance of noise barriers

Noise outdoors – when not treated – can cause health problems like hearing impairment, hypertension, annoyance, and sleep disturbance. Beyond these effects, noise reverberation can create stress, increase transportation-related accidents, as well as stimulating aggression and other anti-social behaviors.

We, at OLSON Acoustics, manufactures Rail & Road Noise Barrier that is an outdoor system designed to protect inhabitants from noise pollution. Noise barrier is known to be the most effective way to treat noise coming from railway, roadway, and other industrial noise sources.

Rail & Road Noise Barrier system is constructed of perforated metal and fiberglass infill for effective sound absorption, high impact resistance, and easy installation at a very competitive price.

Noise barrier for safety

Noise barriers are a necessity on roadways and railways where inhabitants are present. Having noise barriers helps to block direct sound path to residential areas, business offices, schools, shopping centers and other industrial areas. Noise barriers has features that can benefit the inhabitants.

Construction

Unparalleled sound absorption can be achieved if proper noise treatment and noise barrier are used. Noise barrier is known and tested to attenuate noise generated from vehicles running in the railway and roadway. OLSON Acoustics' noise barrier is tested to achieve Sound Transmission Class rating of 30.

Noise barrier is constructed from materials that can perform beyond expectation. Our product is manufactured to withstand any type of physical pressure and weather. Depending on the client's requirements, noise barrier can be custom made to suit any challenging circumstances.

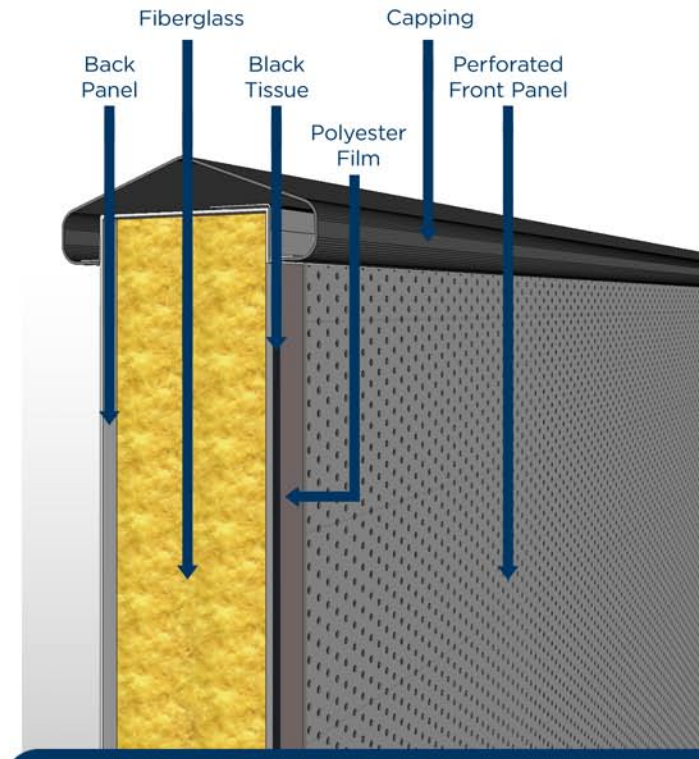
Fiberglass is enclosed with G.I. steel sheet, 0.8mm thick perforated in front and 1.5mm thick at the back. I-beams will be supplied on site to hold the noise barriers in place. Each barrier will be wellded on the beam to Barriers are fully customizable from the infill used, diameter of the perforation, and the size of barrier itself to fit client's specific needs.

"Not only is noise pollution an annoyance, but it can also be a significant short and long-term health hazard."

Rok Ho Kim, Occupational health scientist at the World Health Organization (WHO) Regional Office for Europe

Construction design and materials used in manufacturing are meticulously picked in order to function at maximum performance. Made from **aluminum steel sheet**, housing the infill in front and back. A 0.8mm thick perforated steel sheet and 1.5mm thick steel sheet, respectively, makes sure that proper attenuation is achieved. While the infill can be supplied using various options, we recommend the use of **fiber glass** as it has good absorption at low frequencies. The infill is wrapped with a **black tissue** to prevent erosion and a **polyester film** that makes it impervious to any weather.

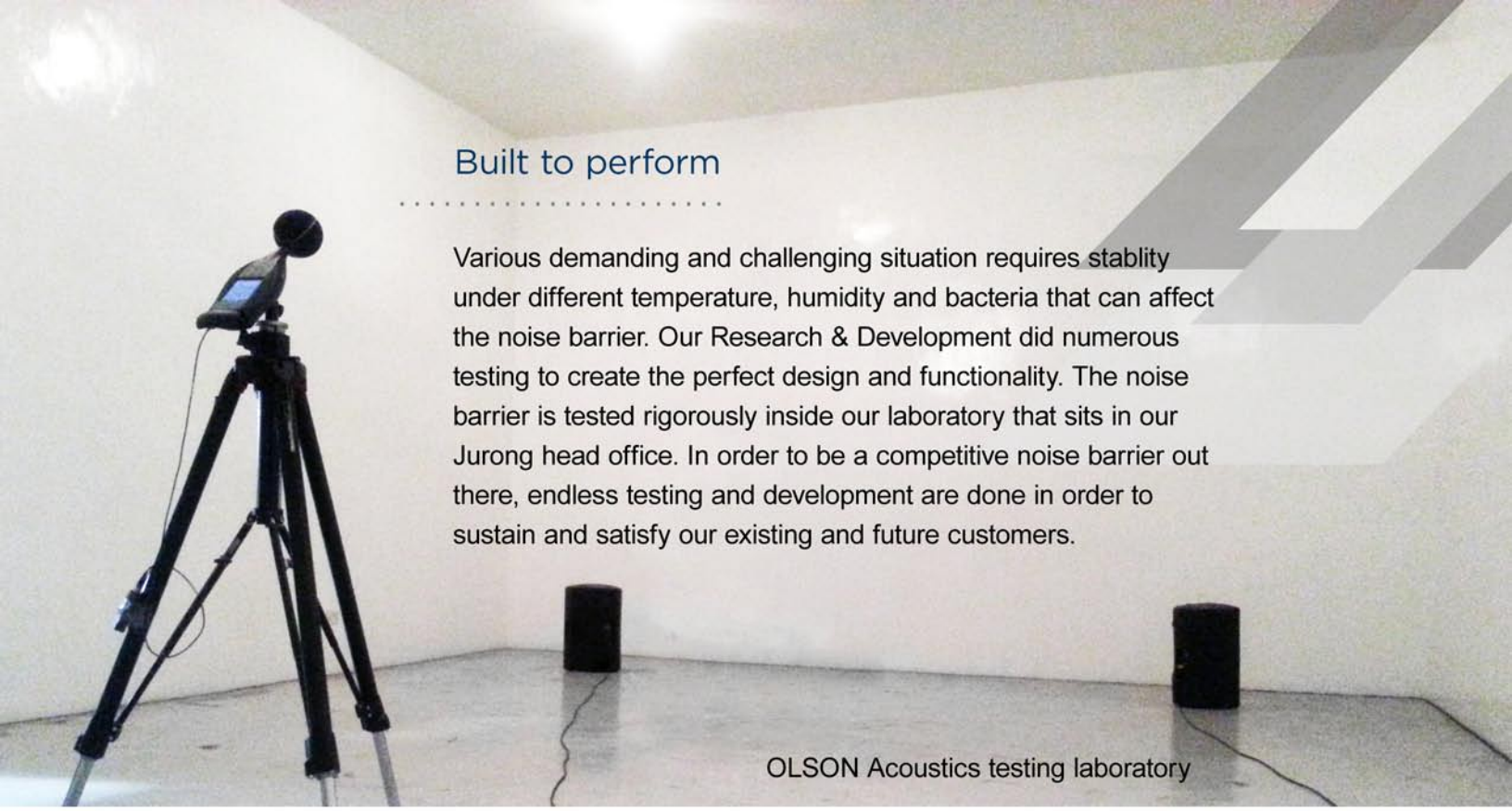
Installation is fast and easy, we supply **I-beams** that are mechanically fixed or welded on a thick base plate on site. I-beams are designed to hold in place multiple noise barriers. Noise barriers are slip inside the I-beam and locked with a **capping**.



CROSS SECTION VIEW

Built to perform

Various demanding and challenging situation requires stablity under different temperature, humidity and bacteria that can affect the noise barrier. Our Research & Development did numerous testing to create the perfect design and functionality. The noise barrier is tested rigorously inside our laboratory that sits in our Jurong head office. In order to be a competitive noise barrier out there, endless testing and development are done in order to sustain and satisfy our existing and future customers.



OLSON Acoustics testing laboratory

Infill alternative

Rail and road noise barrier can be applicable to different surroundings. A selection of infills can be used for a more efficient and suitable sound absorption.

Quietstone

Quietstone is made from recycled glass. This infill product is known for its high versatility as it can be applied outdoors, as well as indoors. With high durability, lightweight, non combustible, sustainable and can even be worked on site.

Rockwool

The product's main component is made from stone wool - a blend of naturally occurring volcanic diabase rock. It is the special component that ensures that it protects against unwanted noise and provide unparalled performance and long lasting.

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