# **Application of aluminum for** the manufacture of noise shields



ЗАВОД Акустических конструкций

Мы производим тишину... We produce silence...



#### Our production





The main element of the noise shield is the panels. For their manufacture, rolled steel or aluminum with a polymer coating is used. The characteristics of the materials are extremely important, allowing to guarantee long-term operation of the screen without loss of acoustic characteristics and maintaining the original look.

Noise shield panels are manufactured on modern equipment, which allows to ensure high accuracy of finished products.

This approach ensure the ease of assembly, but also the quality of noise protection.

In the production of panels, innovative developments are used that make them almost unique product of very high quality, meeting all European requirements ISO 9001 : 2008





Efficient use of resources and regular quality control allow to achieve competitive prices with consistently high quality of finished products



#### вод Сустическия Basic requirements for acoustic screens













• National Standard 32957-2014 Public roads. Acoustic screens. Technical requirements.

•National Standard 32958-2014 Public roads. Acoustic screens. Control methods.

- AVTODOR STANDARD (STO) 2.09.2014 Recommendations for the design, construction and operation of acoustic screens on the roads. "AVTODOR" State Company.
- Methodology Document 218.2.013-2011 Methodical recommendations on protection from transport noise of the territories adjacent to highways.
- Methodical recommendations on estimation of necessary reduction of sound near settlements and determination of the required acoustic efficiency of screens taking into account sound absorption, the Ministry of Transport of Russia N OC-362-p (April 21, 2003г.)



Durability of polymer coating (not less than 15 years)

#### Plasticity of polymer coating

Requirements for strength, frost resistance, water absorption and durability of materials and structural elements used in acoustic screens must comply with regulatory documents





### Color and texture options of coatings



Variety of textures



- corrosion spots on panels and racks due to improper maintenance of the acoustic screen, as well as the use of low-quality materials;
- violation of the integrity of the acoustic screen due to a traffic accident, vandalism or the use of low-quality materials that do not comply with applicable regulatory documents;
- clouding of translucent panels under the influence of aggressive environment, ultraviolet rays and pollution, as well as low-quality raw materials;





Aluminum can be used both for the walls of acoustic panels and in the frame of transparent panels

#### On bridge structures and overpasses

















Screens to protect against noise emanating from engineering equipment









### Photos of installed screens





### Photos of implemented objects











#### ЗАВОД АКУСТИЧЕСКИХ КОНСТРУКЦИЙ

#### **Certificates and patents**

ОРГАН ПО СЕРТИФИКАЦИИ СИСТЕМ МЕНЕАЖМЕНТА

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Since 2009, the company's activities are carried out in accordance with the principles of the international quality management system, which is confirmed by a valid certificate of compliance. National Standard R ISO 9001-2015.



Screens are certified in GOST R systems of Gosstandart of the Russian Federation, are massproduced according to TU-5262-001-13831917-2011 in accordance with STO 5284-001-13831917-2015 and STO 5284-002-13831917-2017, agreed with Avtodor Group.



## We will be glad to cooperate!

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