

# ELEMENT NOISE BARRIERS

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## Some of our projects



PROJECTS:

E6 Kolomoen - Moelv (photo: Lediard Foto AS) / E6: Trondheim - Melhus (photo: Lediard Foto AS) / E39: Os - Bergen (photo: Vassbakk & Stol AS) / E134: Damåsen - Saggrenda (photo: Moss Entreprenør AS) / Kolsåsbanen / Johan Tillers Vei, Trondheim (photo: Lediard Foto AS)

Noise barriers are an important means of reducing noise along railways and roads, and around industrial and residential areas. For noise mitigation to work best and blend in with the surroundings, adaptation in terms of size, shape, materials and colours is important. Talgø is one of the country's leading suppliers of noise barriers in wood, with extensive experience of devising solutions adapted to the specific needs of contractors.

## 1. DESIGN

All our projects start with design, a factor which is absolutely essential for the final result. Elements in our factory are designed and planned by our own, highly experienced personnel, who also follow the production process from start to finish.

## 2. THE PRODUCTION PROCESS

Production of our elements takes place indoors, in modern production facilities with the optimum environment intended to ensure rational processes and high quality. Element production can run parallel with other construction processes, to rationalise and shorten construction time even more.

## 3. ASSEMBLING

Noise barriers are delivered ready for immediate assembling, with lifting straps attached to the top edge. When they are delivered by truck-mounted crane, they can be assembled directly, saving time and cost.



## NOISE BARRIERS

Problems with noise are becoming more and more prominent in modern society. And there is growing demand for barriers against noise and visual disturbance along railways and roads, and around residential and industrial areas.

We are one of the country's leading manufacturers of noise barriers, with long experience of the design, production and servicing of prefabricated noise barriers for a wide range of projects. We supply high quality, locally-adapted solutions in terms of size, shape, materials and colours.

Our noise barriers are supplied as prefabricated elements according to specifications from the developer and contractor. Prefabricated noise barriers mean fast, cost-effective assembling, better quality control, a high degree of precision and low administration on the site.

We believe in close dialogue with developers and contractors before, during and after the project. We can see that demand for noise barriers that can be built and assembled quickly and cost-effectively is growing, and that cladding in eco-friendly materials that require low maintenance have become the new standard.

Håkon Saksen, Talgø BYGG

## THE ADVANTAGES OF NOISE BARRIERS IN ELEMENTS

- Fast assembling
- Better control
- Enhanced quality control
- High degree of precision
- Low administration on site
- Predictable costs

## ADVANTAGES OF NOISE BARRIERS IN MØREROYAL®

- First grade timber
- Stable materials
- Longevity
- Extremely resistant to rot
- Low, very simple maintenance
- Eco-friendly materials

We also supply noise barriers with other cladding types.

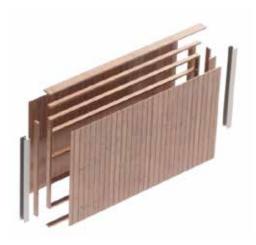


Photo: Nathan Lediard / Lediard Foto AS

## REFLECTIVE / ABSORBENT

Noise barriers can be divided into two different categories: reflective and absorbent. Different materials and shape give different effects on the movement of sound.

#### REFLECTIVE



#### REFLECTIVE

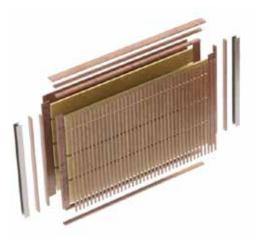
A reflective noise barrier is a solid wall of smooth or hard materials on one or both sides, which bounces sound back to the source.

If a noise barrier is only to be erected on one side of a noise source, it is important to check the direction of the reflected sound. By angling the barriers, reflected sound is directed in a given direction.

#### Technical specifications:

A reflective noise barrier comes as standard in a frame of 73-148 mm, with solid cladding on one or both sides.

ABSORBENT



#### ABSORBENT

An absorbent noise barrier has an uneven surface which does not bounce sound back. Instead, it has a suppressive effect, returning the minimum of sound. They are ideal when only putting a barrier on one side of a noise source.

#### Technical specifications:

An absorbent noise barrier comes as standard with a frame of 73-148 mm, with cladding interspersed by gaps of approx. 4-6 cm. Behind the cladding is an absorbent material, such as Treulitt, Rockwool or the like.

## OUR DELIVERABLES

Our noise barriers come as standard with MøreRoyal® cladding, but can be adapted for any individual project.



### STANDARD DELIVERABLES

Our noise barriers are supplied as standard with cover boards on the posts, and fittings for the top and bottom boards. Most noise barriers are supplied as: 2 - 4 metres wide and 2 - 3 metres high.

## OPTIONS: GLASS

A glazed panel can be supplied on reflective and absorbent noise barriers. Glazed panels are supplied as parts of an element, or as whole elements. Whole elements are often used when there are higher requirements for visibility, e.g. near a residential area.

### MOUNTING NOISE BARRIERS

Elements are usually mounted between HEA/HEB posts, spaced 2 – 4 metres apart.

## DELIVERY AND ASSEMBLING OF NOISE BARRIERS

Noise barriers are supplied as standard in packs of 5-8 elements, with lifting straps on the top edge. When they are delivered by truck-mounted crane, they can be assembled directly, saving time and cost.



#### Please contact us for more details

Håkon Saksen

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Photo: E134 Kongsberg - Moss Entreprenør AS



## RANGE OF PROFILES

5 different profiles

- Grooved
- Solid
- Straight
- Double grooved
- Jointed

Horizontal or vertical cladding

### RANGE OF COLOURS

5 different colours

- RO.0 natural
  - (greys naturally)
- RB.10 brown
- RY.20 ochre
- RG.25 grey
- RS.25 black



## THIS IS MøreRoyal®

MøreRoyal® products are first class, pre-treated materials ready for erection with no top coat needed. The materials have unique properties ideal for the professional market:

- First grade timber
- Stable materials
- Longevity
- Extremely resistant to rot
- Low, very simple maintenance
- Eco-friendly materials

. MøreRoyal<sup>®</sup>

PDIC FOR

WEGIAN.

## THE ENVIRONMENT

Talgø has been environment-certified and approved by MøreRoyal® for many years. You can therefore rest assured that MøreRoyal® is a safe, eco-friendly product – now and in the future.

## OUR CERTIFICATES

### PEFC

Talgø MøreTre AS buys its timber from PEFC-certified suppliers. That means that we choose suppliers with sustainable production.

PEFC is the world's leading system for certification of sustainable forestry and products from sustainable forestry.

Our certificate »

### EPD - ENVIRONMENT DECLARATION

Talgø MøreTre also has the EPD environment declaration (ISO-standard 14025).

An EPD is a short document that summarises the environmental profile of our product in a standardised and objective manner.

An EPD is compiled based on a life-cycle analysis (ISO 14040-14044). The standardised methods ensure that environmental data within the same product category can be compared from product to product, irrespective of region or country. The intention is to be able to compare environmental profiles, and make safe, eco-friendly choices.

#### ECOPRODUCT

ECOproduct is the only method that evaluates the actual environmental properties of building products, based on third party Environmental Product Declarations (EPD).

ECOproduct uses recognised international standards and references to perform its evaluations.

ECOproduct is a method and a database compiled to be able to make environmentally-correct material and product choices in a building project.

#### Our report »

## BREEAM-NOR

BREEAM-NOR is a Norwegian adaptation of BREEAM, administered by Grønn Byggallianse.

BREEAM is Europe's leading environmental certification tool for sustainable buildings. It provides a detailed system for building sustainable buildings in practice.

Our self-declaration »



#### RAW MATERIALS

Our MøreRoyal® products are made of certified raw materials from sustainable forestry.





THE PRODUCT - LIFE-CYCLE

MøreRoyal® has the international environmental declaration EPD, which highlights the environmental aspects of the end product.





THE PRODUCT – PROPERTIES MøreRoyal® is an approved ECOproduct. Actual environmental properties are assessed based on the relevant EPD.





#### THE BUILDING

MøreRoyal® is frequently used in BREEAM-certified buildings. BREEAM

provides a detailed system for building sustainable buildings in practice. Classification is based on documented environmental performance.



<u>Our EPD »</u>

## Why MøreRoyal® on noise barriers?

MøreRoyal® is extensively used for projects with high standards of quality, low maintenance, longevity and environment protection.

## READY TO USE

MøreRoyal® is prime quality timber ready for use with no extra top coat. During the MøreRoyal® process, the materials are treated on all sides to safeguard the qualities of the wood, regardless of the environment it is placed in. The materials can be installed summer or winter, which makes them extremely flexible for professional users.

### STABLE

Treatment with MøreRoyal® means the materials are less prone to warping, shrinking, swelling, splitting or cracking.

## 50 YEAR ROT GUARANTEE

MøreRoyal® has the best rot-resistance on the market: Class 1.

The treatment encapsulates the impregnation in the wood, ensuring extreme rot protection. That only serves to enforce the claim of complete rot resistance for a MøreRoyal® product. The warm, humid west-Norwegian climate is spreading, meaning higher chances of rot damage in houses. We are going to have to use other and more rot-resistant materials than we do at present\*.

### MAINTENANCE-FRIENDLY

The materials can easily go 10- 20 years with no form of refresher treatment. During that period, refreshing the treatment the wood has received is only necessary for cosmetic reasons. Always use MøreRoyal® Wood Oils for freshening up to fulfil the guarantee terms.

## ECO-FRIENDLY

MøreRoyal® is rated as having an excellent environment profile, based on the ECO product industry standard, and is therefore frequently used in BREEAM-certified buildings. Our PEFC certificate proves use of sustainable raw materials, backed by our EPD declaration.

## PRICE

Compared with other pre-treated cladding types, MøreRoyal® is favourably priced. The long maintenance intervals mean a low long-term unit cost when taking into account labour and the cost of paint/stain needed for other cladding types.



Photo: E6 Innlandet / Lediard Foto AS

\*Sources: Climate Researcher Hans Olav Hygen, Norwegian Meteorological Institute and Anders-Johan Akmås, Byggforsk – on climate change and material choice.

## COLOURS



MøreRoyal® colours are transparent, allowing the structure of the wood to be seen and giving the materials a living surface. There can also be a slight variation in surface appearance, due to heartwood, sapwood and knots absorbing different amounts of oil and pigment. The combination of different MøreRoyal® colours in projects gives a varied and exciting appearance.

### COLOURS AND TIME

All MøreRoyal® colours will gradually fade with the effects of the weather. In terms of quality, this is not important, as the oil is baked into the wood to protect the materials. When necessary to refresh the colour with MøreRoyal® Wood Oils will therefore be a cosmetic decision. See AOM concerning maintenance.

### MØREROYAL® COLOURS:



