



KOHLHAUER® NOISE BARRIERS – QUALITY OF LIFE

**KOHLHAUER LIGNA® – NATURAL / RENEWABLE / FLEXIBLE**

Austria · Bosnia & Herzegovina · Bulgaria · China · Czech Republic · France · Germany · Greece · Hong Kong · Italy · Korea · Latvia · Netherlands · Poland · Romania · Serbia · Spain · Sweden · Switzerland · Turkey · United Kingdom

**TIMBER** <

Environmentally friendly  
High durability  
Cost-effective designs



# KOHLHAUER **LIGNA**<sup>®</sup> - AN IDEAL ADAPTION TO THE ENVIRONMENT

## NATURAL WOODEN NOISE PROTECTION

KOHLHAUER<sup>®</sup> noise barriers globally stand for ecological as well as innovative, durable and economical protection solutions. Furthermore they can be distinguished through its natural design - KOHLHAUER **LIGNA**<sup>®</sup>, the natural and cost-effective solution.

KOHLHAUER **LIGNA**<sup>®</sup> - High quality timber noise barriers from treated pine (other woods are available upon request) as a highly sound absorbing or sound reflective version. Both types are in accordance with the German ZTV-LSW 06 standard and official test results are available. The elements are CE-certified and correspond to EU standards.

The elements are to be mounted between pre-installed posts; in piling pipe, concrete sleeve or auger pile foundations. Wall heights up to 6 m are feasible.

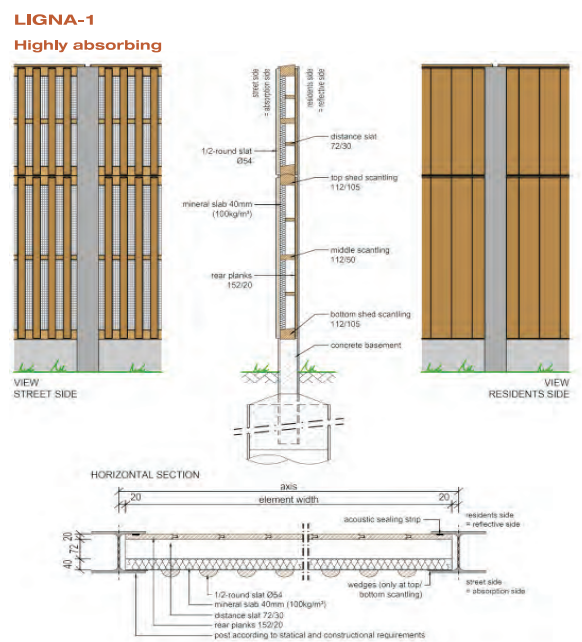
### THE CONSTRUCTION

#### LIGNA-1 | Highly sound absorbing

Upper and lower chord made from profiled cross timbers. Vertical key and slot planking on the back side. All screws and nails from stainless steel V4A accord.to EN 267 (Part 11). In front of the planks an absorption mat (density=100 kg/m<sup>3</sup>) is mounted; it is covered by a black glass mat on the front side. Vertically nailed round timbers serve as cladding on the noise exposed surface. Vertical frame timbers incorporate milled grooves for pre-compressed joint tape. Additional locking through wedges.

#### LIGNA-2 | Reflecting

Implementation without absorption plate and the round logs at the front-side.



LIGNA-1

# KOHLHAUER **LIGNA**<sup>®</sup> - AN IDEAL ADAPTION TO THE ENVIRONMENT

## NATURAL WOODEN NOISE PROTECTION

### WOOD PROTECTION

A chemical wood preserver is applied through pressure impregnation according to EN 68 800 with chrome free CX-salt (slightly green colour shade). The impregnation is environmentally friendly and persistent. As a result of its resistance to deicing salt, no post-treatment is required.

### STANDARD SIZES

3960 x 2000 mm

3960 x 1500 mm

3960 x 1000 mm

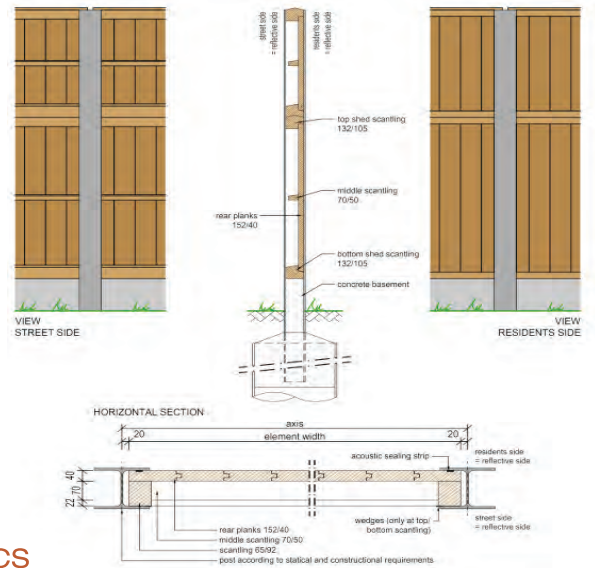
(Special formats available upon request.)

Strength: approx. 0.13 m

Weight: approx. 55 kg/m<sup>2</sup>

For wall heights up to 6.0 m.

### LIGNA-2 Reflecting



### CLASSIFICATION OF THE ACOUSTIC CHARACTERISTICS

According to EN ISO 717-1 as well as EN 1793

#### Sound insulation

#### Absorption

LIGNA-1

RW (C;Ctr) = 32 (-1;-4) dB;  
DL<sub>R</sub> 29 dB (Category B3)

DL<sub>a</sub> = 10 dB (Category A3)

LIGNA-2

RW (C;Ctr) = 25 (0;-2) dB;  
DL<sub>R</sub> 25 dB (Category B3)



LIGNA-2



**R. Kohlhauer GmbH**  
Draisstraße 2  
76571 Gaggenau | Germany  
Phone: 0049 72 25 97 57 -0  
Fax: 0049 72 25 97 57 -26  
E-Mail: info@kohlhauer.com



**GreeNestForm AB**  
Verkstadsgatan 11  
599 21 Ödeshög | Sweden  
Phone: 0046 144 31409  
Fax: 0046 144 31429  
E-Mail: info@gnf.eu

[WWW.KOHLHAUER.COM](http://WWW.KOHLHAUER.COM)

[WWW.GNF.EU](http://WWW.GNF.EU)

## MORE KOHLHAUER® PRODUCTS



Transparent, reflecting respectively absorbent noise barrier systems with transparency and glare shield.



The plantable noise barrier - eco-friendly, sustainable and highly functional.



Double benefit: Noise barrier combined with sustainable power generation through solar technology.

