



KOHLHAUER® NOISE BARRIERS – QUALITY OF LIFE

KOHLHAUER PLANTA® – NATURAL AND ENVIRONMENT-FRIENDLY

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

PLANTABLE



Improved construction
Smart system components
Individual design options





KOHLHAUER **PLANTA**[®] – UTMOST FUNCTIONALITY **FOR PLANTABLE NOISE PROTECTION**

KOHLHAUER **PLANTA**[®] noise barriers stand for ecologic noise barrier solutions worldwide. Whether with or without planting – KOHLHAUER **PLANTA**[®] excels with natural design that adapts seamlessly to any environment.

The sophisticated element design and advanced system components allow for an extremely easy assembly of the noise barriers. KOHLHAUER **PLANTA**[®] – the reasonable solution for any budget.

APPLICATION

KOHLHAUER **PLANTA**[®] noise barriers perfectly combine an appealing finish with sustainable construction and high technical requirements. All KOHLHAUER **PLANTA**[®] noise barriers have been tested by renowned institutes for noise insulation, sound absorptivity, wind load, frost and road salt resistance, durability, etc.

BENEFITS

- Innovative aluminium sectional frame for adaption to regional and statical requirements
- Solid tongue and groove interlock for easy stacking of multiple elements
- More solid vertical bars for even higher noise barriers (EN 1794-1, App. A)
- Ventilation and drain ducts for constant noise barrier performance and water drainage
- Innovative click-fastening system for various vertical post profiles (patent pending) reduces the assembly time effort at the construction site
- Modular standard components (3960 x 1000 mm, 3960 x 500 mm) for a cost-efficient and short term delivery realisation of small and large-scale projects
- Various height compensation modules (stackable) for easy adaptation to different landscapes
- Extensive colour range for all system components allows an individual design
- CE-certified quality





NOISE BARRIER IS QUALITY OF LIFE

Noise in residential areas is often perceived as annoying. This is where man and noise are in a direct conflict. KOHLHAUER **PLANTA**® barriers help to ease the situation, supporting the life quality of our environment.

Bypass roads, highways and motorways are a permanent source of noise. Protecting the residents from annoying noise puts some special requirements on noise barriers.

Inner city areas require flexible noise barrier solutions that can be placed easily between existing objects. Limited space availability always requires suitable noise barrier solutions that integrate seamlessly with the environment.

More and more engineers, landscaping architects and authorities rely on KOHLHAUER **PLANTA**® for its high sustainability, effectivity and acceptance by residents.



PRODUCT SPECIFICATIONS

- Excellent sound-insulating and highly absorptive performance, classified in B3 and A3-A4 according to ZTV-Lsw on both sides
- Suitable for extensive planting on both sides
- Solid element structure for a consistent natural appearance, also without planting
- Extremely high aging and corrosion resistance
- High UV and colour resistance of all used materials
- Combinable to other KOHLHAUER® noise barrier elements
- All used materials 100% recyclable

TECHNICAL SPECIFICATIONS

- Noise insulation, group B3 according to DIN EN 1793-2
 - Sound absorption, group A3-A4 according DIN 1793-1
 - Wind load of up to 2,0 KN/m² and more
 - Weight: 130 kg/element
 - Building width 122 mm
 - Fire resistance, assigned to class A1 according to EN/ISO 1716 and 1182
 - Minimum useful life: 30 years
 - Load bending tested according to EN 1794-1
- Reasonable modifications, meeting our high quality requirements and supporting the further product development, are reserved.

CLASSIFICATION OF THE ACOUSTIC CHARACTERISTICS

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

	Sound insulation	Absorption
PLANTA BASIC	$R_w(C;C_{tr}) = 34$ (-2;-6) dB; DL_R 28 dB (Group B3)	$DL_a = 11$ dB (Group A3)
PLANTA BASIC-4	$R_w(C;C_{tr}) = 33$ (-2;-6) dB; DL_R 27 dB (Group B3)	$DL_a = 12$ dB (Group A4)
PLANTA BASIC-11	$R_w(C;C_{tr}) = 36$ (-2;-7) dB; DL_R 29 dB (Group B3)	$DL_a = 13$ dB (Group A4)

SYSTEM LAYOUT

BASIC ELEMENTS

- The basic elements are available in sizes of 3960 x 1000 mm or 3960 x 500 mm (for use in the lower or upper wall section)
- Elements can be displaced using the reusable eyebolts and sleeves integrated in in the upper chord
- Standard equipment: innovative aluminium concept frame, galvanised (80 μ) load-transferring steel grid, HDPE grid fabric (green, mesh sizes: 4 x 4 mm), KOHLHAUER® insulation (145/160 kg/m³) classes B3/A3, incl. 2 fixing springs
- The elements are fixed in the pole using patent-pending fixing springs

ADVANCED ELEMENTS

- **Height compensation 100** to compensate for various ground shapes, as base elements for ground integration or as a design variant between the elements
- **Height compensation 25** for use between the elements
- **Cover** for a proper finish of stacked elements with innovative click technology
- **Adjustment** to post HEA-U 160 and larger available
- **Grid fabrics** in various colours with small mesh size (1.5 x 1.5 mm) for an enhanced visual appearance of the noise barrier
- **Acoustic insulation** foils for meeting special sound insulation ($R_w > 36$ dB, $DL_R > 29$ dB) and sound absorption ($DL_a > 13$ dB) requirements
- Selected **RAL colours** for a high-quality visual design of the noise barrier (see colour sheet)

COLOUR CHART

Red tones



RAL 3001
Signal red



RAL 3003
Ruby red

Blue tone



RAL 5017
Traffic blue

Green tones



RAL 6005
Moss green



RAL 6011
Reseda green

Metallic effect

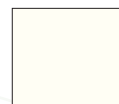


RAL 9007
Grey aluminium



RAL 9006
White aluminium

White



RAL 9010
Pure white

Grey tones

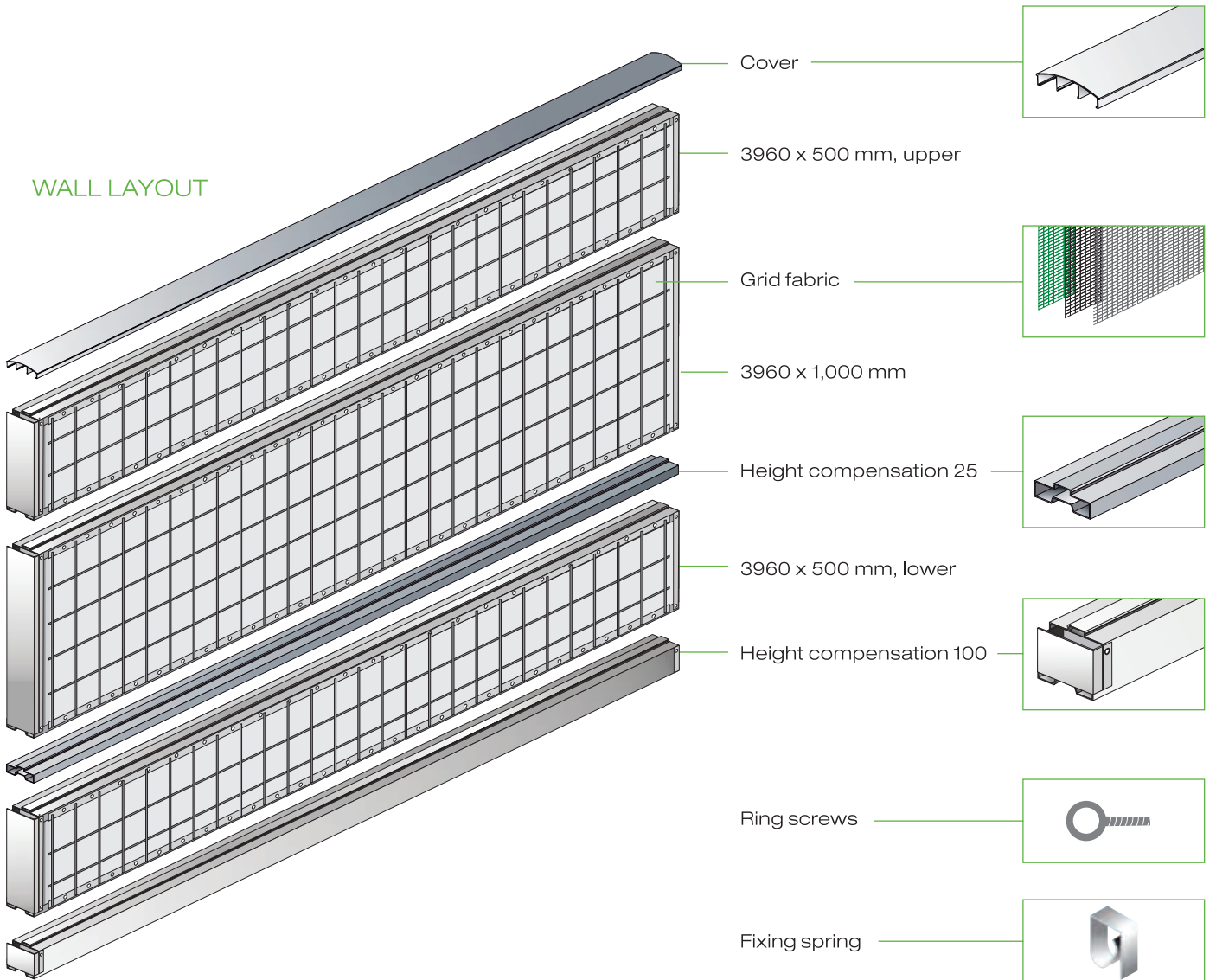


RAL 7004
Signal grey



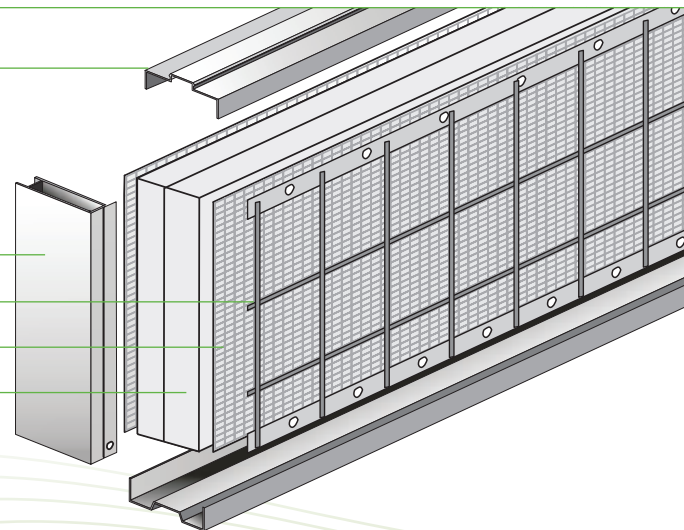
RAL 7035
Light grey

WALL LAYOUT



WALL LAYOUT (FROM OUTSIDE TO INSIDE)

- Innovative aluminium structure frame with tongue and groove section
- Lateral section for supporting the fixing spring
- Load-transferring, galvanised steel grid
- UV-resistant grid fabric
- Double-layer, highly dense mineral wool, RAL quality certificate





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Grid-Insulation-System (GIS)
in many different and various
design variants.



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



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

