

Technical Specifications KOKOWALL HIGH ABSORPTION NOISE BARRIER



Dimensions and pattern Kokowall Barrier:

- Standard pattern (HEA upright): $w_{\text{pattern, standard HEA}} = \text{panelwidth: } 3.960\text{mm (hoh. } 4.000\text{mm)}$.
- Any other size smaller than 3,96 can be supplied
- Maximum height: $h_{\text{max}} = 6$ metres starting from ground level (3 stacked panels)
- For a Kokowall Noise Barrier measuring higher than 2,20 metres (starting from the ground level) the height is divided into 2 or more stacked panels.

Steel Construction, HEA uprights:

- *Style of Foundation column:*
Taking into account the barrier's height, windload and soilconditions as from HEA120 up to IPE300 (or HEA240) are applicable – S235 hot-dip galvanised NEN 1275, (EN ISO 1461) DIN 17100 quality standard. Headplate $d=20\text{-}25\text{mm}$ with slots for bolts.
- *Style of upright:*
Taking into account the barrier's height, as from HEA120 up to IPE300 (or HEA240) are applicable – S235 hot-dip galvanised NEN 1275, (EN ISO 1461) DIN 17100 quality standard., with pre drilled mounting holes, diameter 8 mm, Optional powder coating in any desired colour., Footplate $d=15\text{-}25\text{mm}$ with 90° slots for bolts.

Panels:

- Framework made of cold-rolled U-90-50-3, profile S235, hot-dip galvanised NEN 1275, (EN ISO 1461) quality standard DIN 17100.
- Sound insulation, single number descriptor reading - NEN-EN-ISO-717-1: $R_w = 29\text{dB(a)}$ - NEN 1793-2, Category B3. Please see attachment TNO Sound Insulation reading.
- Sound Absorption, single number descriptor reading - NEN-EN-ISO-717-1: $D_{10} = >11\text{dB(a)}$ - NEN 1793-1, Category A4 . Please see attachment TNO Sound Absorption reading.
- At Kokowall side: $\varnothing 32\text{mm}$ cocopoles ± 23 psc. / m^1 / side
- In between a layer of 40mm mineral wool
- At backside a plastisol steelplate 0,75mm, stabilised with a 5mm galvanised wire netting mesh 15 x 15cm
- Mass of panels: 22–28 kg/m^2 depending on size
- *Dimensions panels: Standard HEA*

Standard width panel :	$w_{\text{panel, stand}}$	= 3.960
Allowable placement tolerance:	$T_{\text{pl. panel}}$	= 40 mm (in relation to w_{pattern})
Maximum height panel:	$h_{\text{panel, max}}$	= 2.000 mm

Concrete rim:

- Positioned under the panels for support and used for limited slopes. Enforced with 4 x concrete iron wire $\varnothing 8\text{mm}$
- Dimensions Standard Rim 2.960 or 3.960 x 190 x 90mm (can easily be cut with a grinder to desirable size)

Joint materials:

- Attachment panels, per item:
8 x self-drilling hexagon shoulder pin ST.6,3 x 38 mm - DIN 7405K
- Attachment uprights, per item:
4 x Bolt / Washer and Nut M16-M30 x 90 hexagon head hot dip galvanised, DIN 933 Quality 8.8

Synthetic material:

- Recycled fire-retardant ABS, pipes diameter $\varnothing 32$ mm, wrapped in coconut fibres with UV- stabilised multifilament PP threads.
- EPDM self-adhesive cellular rubber, 15 mm between stacked panels.

Coconut:

- Only the longest and durable mattress fibres are applied. The applied coconut fibres are checked continuously in order to guarantee an EC (saline) content of $< 0,5\text{mS/cm}$.
- Coconut fibres serve as a bonding substrate for several climbers' aerial roots.
- Treated with Sepulchre Firestop. Fireproofed according to NEN6065 Flame Spread Category 2.