ABSORBENT AND REFLECTING SOUND BARRIER SYSTEMS MADE OF WOOD

BECK Sound Barrier Systems, Inc. supplies reliable top-quality wood barrier systems as highly absorbent or reflecting design structures. There are test certificates available for both types in accordance with the requirements of ZTV-Lsw 88, and they have been approved for use by the national German railway company, Deutsche Bahn AG.

Barriers made of wood offer ideal conditions for climbing plants, with or without integrated trellises. The pressure impregnation is eco-friendly and durable, it does not need to be retreated during its long service life.

Sound barriers made of wood offer special design possibilities, have an excellent ecological balance (CO_2-neutral) and make an important contribution to relieving the strain on the environment and saving on resources.

● Highly Absorbent Sound Barrier System „BL 99 a/1”

Technical Data

Airborne noise insulation acc. to DIN EN 1793-2	32.00 dB
Sound absorption acc. to DIN EN 1793-1	9.00 dB

Dimensions

Width	Axle dimension less 1 1/2”
Axle dimension of the posts	max. 16’8”
Thickness	6 3/4”
Height	up to 20ft
Weight	121lb/qm (55.00 kg/qm)

The panels are mounted above one another. Special dimensions are available for adapting the barrier to the topography of the land, as well as adapter pieces for installing doors and entry gates.

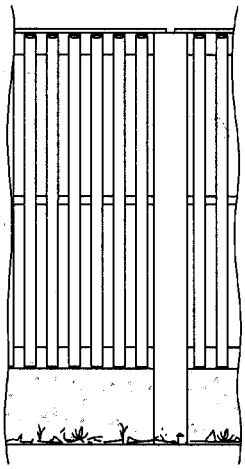
Material

Wolmanized pinewood or alternatively larch wood is used without wood preservative treatment.

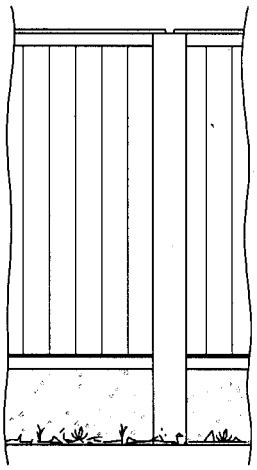
Wood Preservative

By profiling the wood cross-sections in an appropriate way, high construction wood preservation is achieved. Chemical wood preservative is by wolmanizing according to DIN 68 800 using CX-salt (chrome-free). The color is green. Dyeing is possible to a limited extent.
The impregnation is resistant to thawing salt and is vegetation friendly.
The barriers are especially suitable for climbing plants.

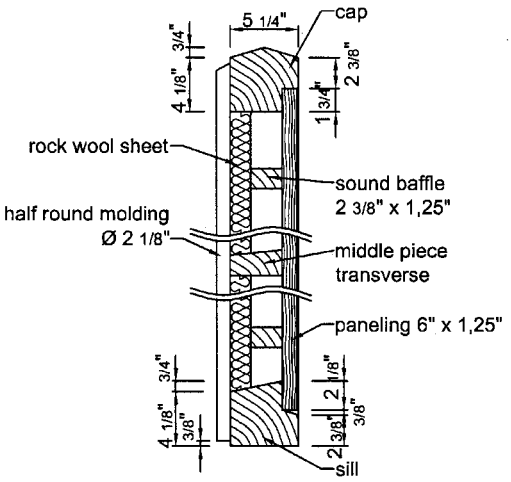
highway view



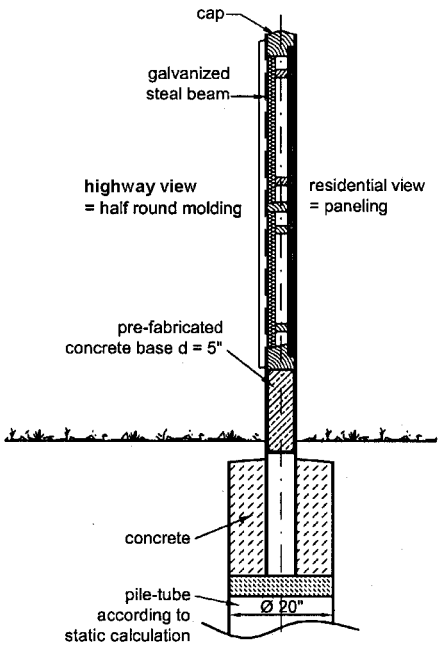
residential view



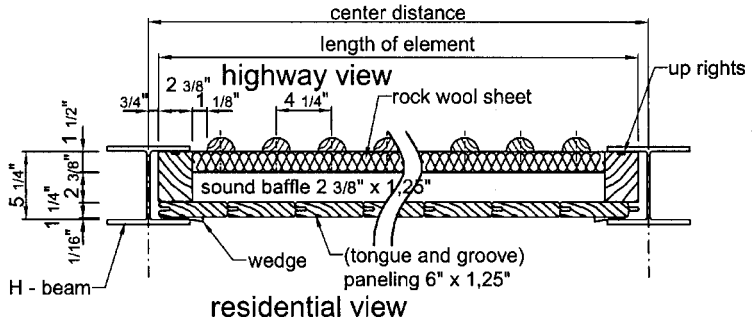
vertical cross section detail



vertical cross section



horizontal cross section



Fasteners

Screws, grooved nails made of stainless steel V4A in compliance with DIN 267, Part 11.

Structure

The upper and lower frames are made of profiled cross timbers. Tongue and groove boards (1 1/4") are nailed into these from behind in a vertical arrangement. An absorption plate with a raw density of 220 lb/cbm (100 kg/cbm) is mounted in front of the boards with a space of 2 1/2" left between. The front of this absorption plate is covered in black glass fibre matting. A casing of vertical flattened round rods (Ø 2 1/8" x 1 5/8" core-separated and milled) is nailed to the barrier on the sound entry surface. Vertical filler blocks with a milled groove for gripping the sealing tape are mounted to the post connections. Wedges at the back are an additional means of fixing the barrier in place.

Assembly

The barrier components are lifted in between steel posts (e.g. IPBL 160) from above.

Reflecting Sound Barrier System „BL 92 R"

Technical Data

Airborne noise insulation acc. to DIN EN 1793-2	26.00 dB

Dimensions

Width	Axle dimension less 1 5/8" (4.0 cm)
Axle dimension of the posts	max. 16'8"
Thickness	5'3"
Height	up to 20 ft
Weight	66 lb/qm (30.00 kg/qm)

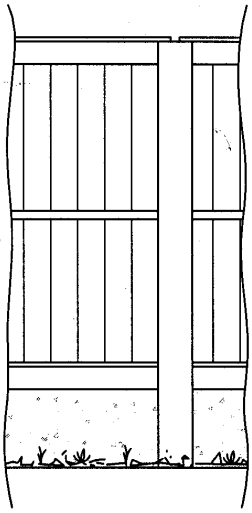
The panels are mounted above one another. Special dimensions are available for adapting the barrier to the topography of the land, as well as adapter pieces for installing doors and entry gates.

Structure

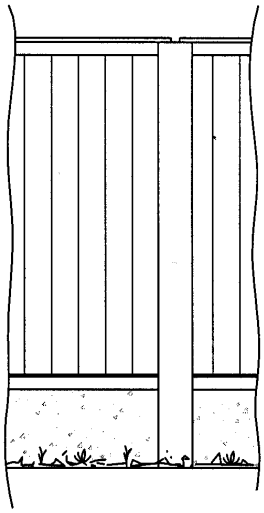
The upper and lower frames are made of profiled cross timbers. Tongue and groove boards (1 5/8") are nailed or screwed onto these from behind in a vertical arrangement. Vertical filler blocks with a milled groove for gripping the sealing tape are mounted to the post connections. Wedges at the back are an additional means of fixing the barrier in place.

Further explanations as sound barrier system "BL 99 a/1".

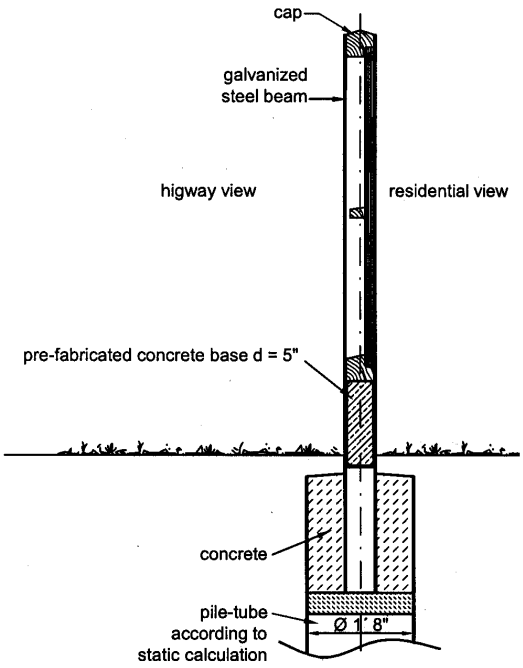
highway view



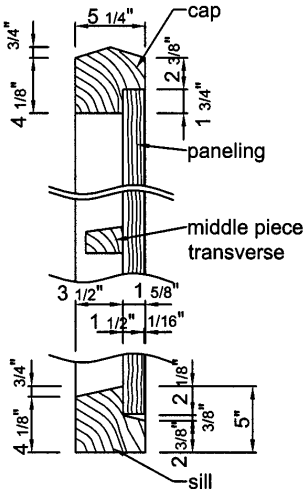
residential view



vertical cross section



vertical cross section detail



horizontal cross section