

TRANSPARENT SOUND BARRIER SYSTEMS

Transparent sound barrier systems provide an aesthetic and functional alternative to other systems. The free view always gives the impression of a "light construction". This means that special design requirements can be taken into consideration. For this reason, this type of barrier is often used on bridges or integrated in closed barrier systems in combination with a wooden or aluminum frame.

The following transparent materials are used:

- Acrylic (Perspex™ Clearview) with and without surface screen print
- Plexiglas Soundstop® GSCC with integrated polyamide threads
- Polycarbonate
- Silicate glass (laminated glass made of 2 x 3/8" TVG)

A specially developed post system (WIBKO, see technical drawing p.3) makes timesaving assembly possible and needs very little maintenance.

● Sound Barrier System Transparent In Four Implementations

Technical Data / Dimensions / Material

Perspex™ Clearview (XT 0X03) and MS 017 acrylic glass:

Characteristic value in compliance with ZTV-Lsw 88: $\Delta L_{A,R,Str.} = 31$ dB (specification: 25 dB)
Meets the requirements of the relevant sections of ISO 7823 Part 2 and is approved according to ZTV-Lsw 88

The light transmission of transparent panels is 92%

Weight (1/2") 11.36lb/sqft

Excellent impact and weather resistance

Soundproofing effect (reflecting): at thickness 1/2" or 3/4" more than 32 dB or 35 dB respectively

Dimensions: in thicknesses of 1/2", 5/8" and 3/4" (up to 1") from 6'8" x 5'6" to 10' x 6'8" depending on test certificate and fixing conditions

Dyeing possible



Technical Data / Dimensions / Material

Soundstop® GSCC acrylic glass:

Characteristic value in compliance with ZTV-Lsw 88: $\Delta L_{A,R,Str.} = 29$ dB (specification: 25 dB)

Thickness 1/2" according to test certificate

Weight 11.36lb/sqft

Integrated polyamide thread \varnothing 1/16", distance 10' within the panel

Application particularly suitable in exposed spots according to ZTV-Lsw 88

Dimensions: as with Perspex™

Polycarbonate panels (SOUNDGARD ST/TOP):

Characteristic value in compliance with ZTV-Lsw 88: $\Delta L_{A,R,Str.} = 30$ dB (specification: 25 dB)

Thickness 1/2" according to test certificate

Weight 8.92lb/sqft

Dimensions up to 6'8" x 6'8" or 6'8" x 10' respectively

Installed in an aluminium frame (can be dyed if necessary)

Extremely friction-resistant and resistant to chemicals thanks to surface treatment

Silicate glass:

ESG (tempered safety glass) or VSG (laminated safety glass)

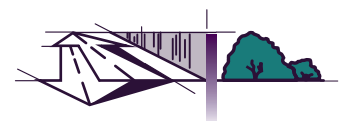
The 2-layer design is built up as follows: 2 x TVG (part-pre-stressed) with PVB foil inside

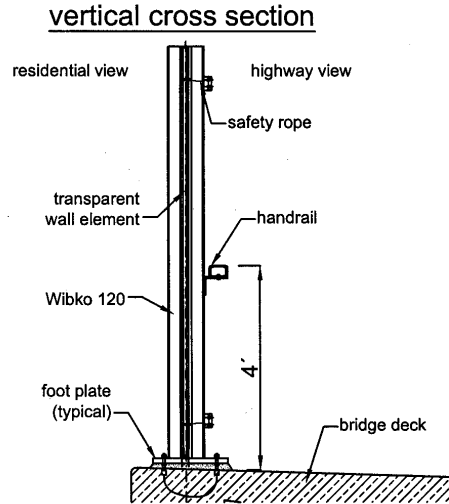
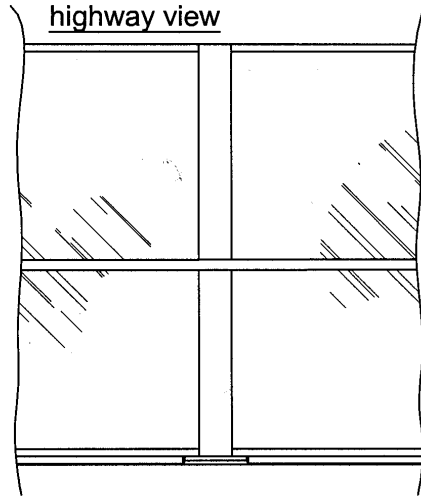
Advantage of part-pre-stressing:

- No falling fragments
- The paned glass elements have sufficient load capacity for replacement if broken
- No sound penetration despite break

Bird protection decoration or various patterns are available for all transparent materials.

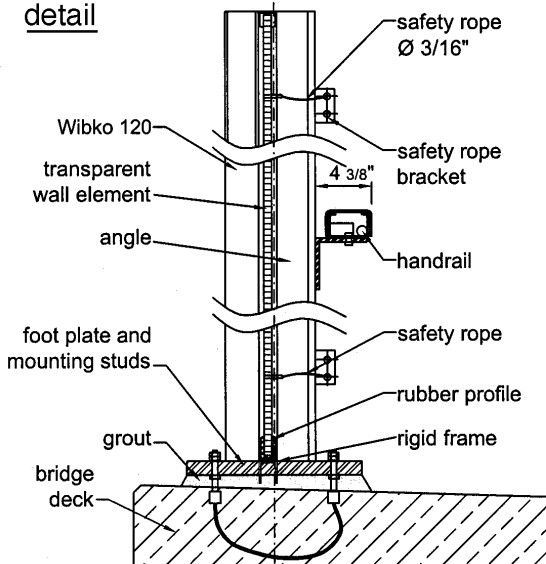
At exposed spots, such as on bridges with traffic routes beneath them, the elements are secured in place using stainless steel ropes.





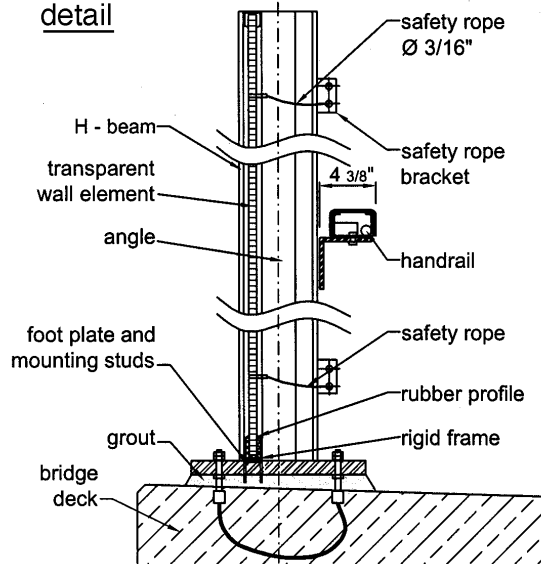
system: WIBKO - 120

vertical cross section detail



system: H - beam

vertical cross section detail



horizontal cross section

