

HydroBeam®
Mobile Flood Protection Barriers

Leak-tight stop-log flood protection
for uneven terrain

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The challenge

Worldwide flooding in recent years underlines the need for ongoing protection. The usual flood protection measures are dykes, walls and protection barriers. Today these are often washed over during extreme rain events. Stationary flood protection is expensive and time-intensive. Up to now, the sandbag has been the most important defence weapon. Technical relief agencies and municipal authorities have reached the limits of what they can do.

The Solution

Against this background, Steinhardt GmbH has developed the **HydroBeam®** mobile flood protection barriers that provide a fast and sustainable defence against flooding for larger areas. The innovative double seal ensures superior values in leak tightness compared to similar systems. The standardised module system offers a maximum of flexibility and is easy to erect and to take back down again.

The vertical **HydroBeam®** system mHWS-90 is anchored into the ground by means of a robust support construction. One stop-log unit of 1 m height and 3 m length represents the equivalent of around 500 sandbags. The diagram to the right gives an overview of water heads and corresponding module lengths.¹⁾

The DBA-2 profile, made of aluminium AlMgSi 0.5 F22, has become an established standard for medium protection range widths.

¹⁾ Certification is generally required for bearing capacity and buoyancy. Additional sheet-piling and/or concrete walls/slabs may be required. Dynamic forces such as wave forces, lateral currents and impacting forces caused by flotsam are to be taken into consideration.

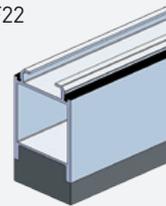
Advantages

- robust construction for the absorption of high forces
- effective **HydroBeam®** double sealing system for high leak-tightness performance
- special PU sealing evens out floor (up to approx. 15 mm)
- load values have been calculated by an independent body
- system is easy and quick to install
- free selection of field widths
- retrofit possible – combinable with existing systems / structures
- ideal integration into existing landscape
- light aluminium stop-logs from approx. 5.11 kg/m
- specification of support segments with erection plan
- **HydroBeam®** store system

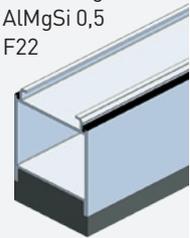
HydroBeam® DBA-1a
50 x 150 (mm)
ca. 5,110 kg/m
AlMgSi 0,5
F22



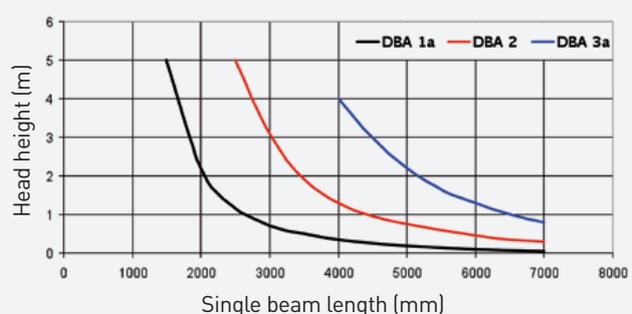
HydroBeam® DBA-2
90 x 150 (mm)
ca. 7,232 kg/m
AlMgSi 0,5
F22



HydroBeam® DBA-3a
150 x 175 (mm)
ca. 9,74 kg/m
AlMgSi 0,5
F22



Max. impounding head



Stop-logs bend $M=1/150$; Larger field widths and heights on request