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Transportable Protective Steel Walls

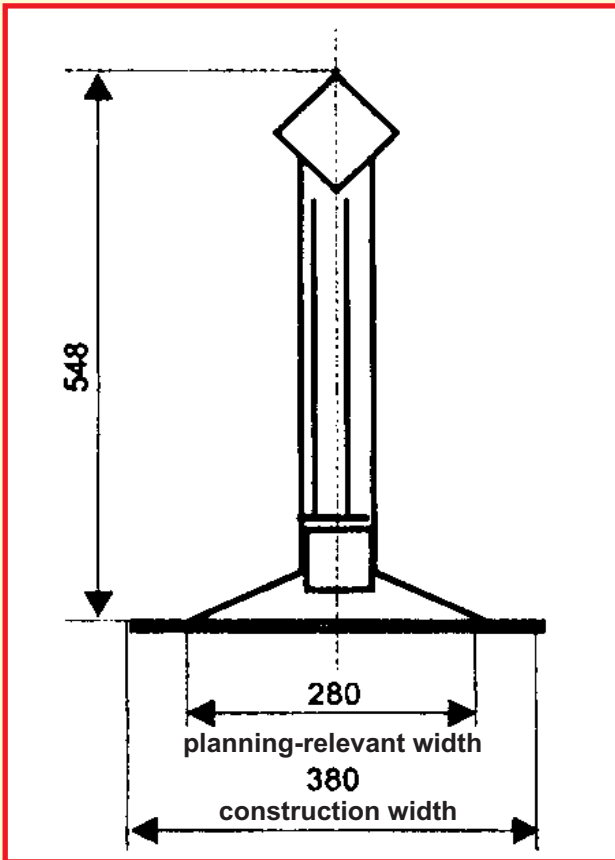
STGW 4200



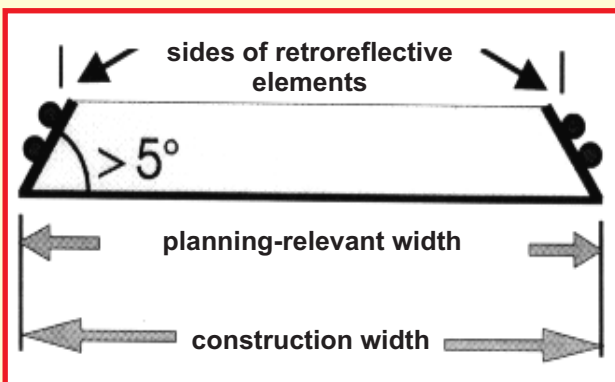
The narrowest mobile protective steel wall from Peter Berghaus GmbH: stable and safe



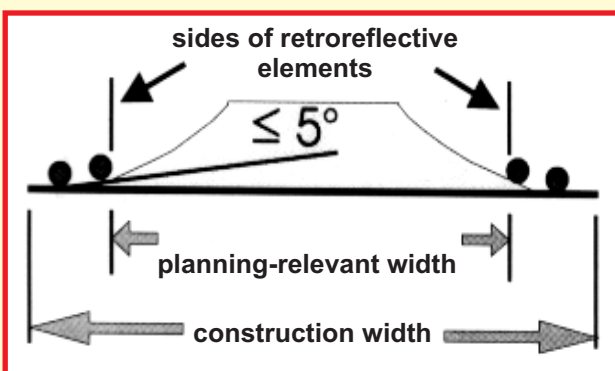
Important factors: construction width and planning-relevant width



① STGW 4200



② Drawing for definition of planning-relevant width



What do construction width and planning-relevant width mean?

All those who are responsible when the matter concerns the use of transportable protective walls should know what construction width and planning-relevant width mean. Thus, among other things, you can read in some tenders '...planning-relevant width below 30 cm'. This can be necessary if the prescribed minimum carriageway width in the area of the road works cannot otherwise be kept to.

If a protective steel wall with the test criteria of $T 1 \leq W 3$ is used to separate the oncoming traffic, a construction width of 50 cm is usually assumed. If carriageway cross-section does not produce this measurement in the road works phase, other possibilities must be looked for. Then, a protective steel wall is often dispensed with unnecessarily and a marking or a guide track only separates the lanes of traffic in opposite directions.

It is not our intention to discuss possible endangering here. However, there is a better solution. If you look at the cross-sections of the protective walls on the market, it will be quickly recognised that some protective walls demonstrate a second important measurement apart from the construction width, namely the planning-relevant width (see TL - Transportable Schutzeinrichtung '97 [Transportable Protective Facilities], Page 4 on this). We have indicated the construction width and planning-relevant width in the accompanying sketches.

As can be perceived in Drawing 1, in the case of the STGW 4200 the planning-relevant width is less than 30 cm (exactly 28 cm). In comparison to this, a normal double line of marking foil or road studs is wider, about 40 cm in fact. At the same time, the protective steel wall takes over the function of the markings, because it is equipped with reflectors in accordance with the regulations (BASt tested).

The scheme drawings show an excerpt from 'TL - Transportable Schutzeinrichtung '97', Page 4. Here, it is shown that all edges with an angle $\leq 5^\circ$ are regarded as capable of being driven over. At the moment, no protective steel wall with such small construction and planning-relevant widths, apart from the STGW 4200, is on the market. The advantageous area of effectiveness does not change, in spite of the lower planning-relevant width.

STGW 4200 is also invaluable in the urban sector

Safety in the narrowest space!

Our STGW 4200 is a stable protective steel wall to separate streams of oncoming traffic. We offer safety in the narrowest space with it. A system thought through down to the smallest detail with a construction width of only 38 cm has been constructed, built in accordance with DIN EN 1317-2 and subsequently tested successfully in accordance with TB 21.

Unfortunately, many motorway cross-sections are not wide enough to set up a normal 4:0 traffic management. It has been and is continually attempted to separate the streams of traffic meeting at a relatively high speed on motorways and other roads only with guide tracks or even solely with marking foil. With our STGW 4200, we are able to offer a safe system for this measure to separate oncoming traffic with a width of only 38 cm. So, sufficiently wide traffic-lanes will still remain where minimum cross-sections are available.

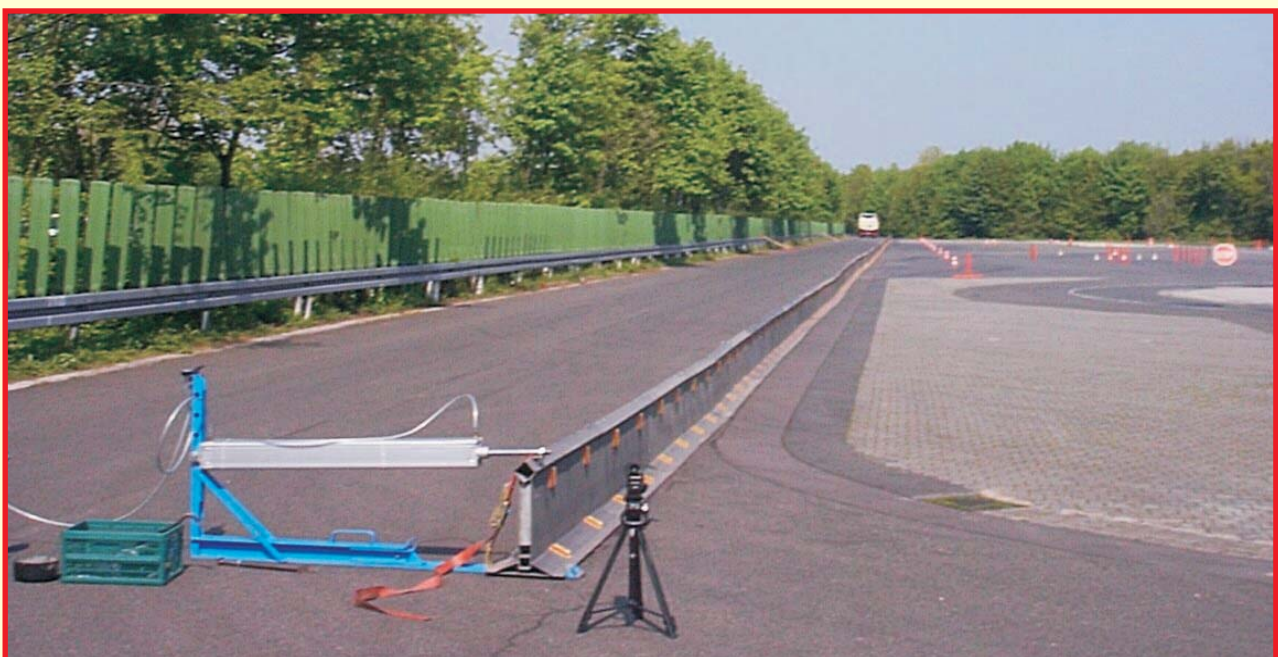
This wall is also very gladly used in urban locations. Apart from safe traffic management, it also separates pedestrians from the carriageway consistently. In the case of urban road works, it is impossible for residents to drive into them and to obstruct the construction work through this. It is also no longer so easy for the construction companies to extend the area of the road works simply by shifting, as is usually the case with road works only protected by movable barriers.



The ideal protective wall for narrow traffic-lanes

The yellow marking next to the wall can be dispensed with. It is even possible to attach a handrail by means of extensions. In the case of this wall, 2 metre elements permit even the smallest radii.

All these advantages of our STGW 4200 are also convincing when it is used in the urban road works sector!



The test for the limitation of the topple-length has been successfully passed.

Tested reflectors replace the yellow markings today



Only Bast-approved reflectors would be used

The reflectors

The reflector levels that reflectors must demonstrate are established in the 'TL - Leitelemente '97'. Our reflectors have been tested at the BASt in accordance with the 'technical light characteristics of reflectors for guide elements'. Thus, the steel protective wall

can also be used in the function of a guide wall. In the case of the reflectors that we use, the reflector level lies above the required 12 mcd/lx to about 22 mcd/lx. An additional yellow marking on the road parallel to the protective steel wall is accordingly no longer necessary.

Logistics and Construction

Our company's vehicles are loaded with pre-installed 14 metre wall elements, so that construction can proceed quickly and without long obstruction of the traffic flow. Many years of experience in

logistics and construction are the big advantage of our installation gangs. Each worker knows what has to be done. A well-prepared road works allows a daily performance of up to 3000 metres.

Technical Data

Approach Test

Inspection and approval:	TB 21
Test date:	5. 10. 1994
Containment level:	T 1
Test location:	Lyon
Test length:	103 m
Base anchoring:	No

Description of System

Height:	0.55 m
Element length:	2 m
Foot width:	0.38 m
Planning width:	0.28 m
Weight per m:	47.5 kg

Test Conditions

Inspection and approval	Test vehicle	Weight	Approach angle	Speed
TB 21	Car	1300 kg	8°	80 km/h

Working width in accordance with EN 1317-2 / Results

Containment-level	Dynamic bend	Construction width	Sum C. 2+3	Working width	ASI value
T 1	0.47 m	0.38 m	0.85 m	W 3	0.12

Appr.-No. Crash-Test: BASt/95 7S 51/ELL - Appr.-No. Reflectorelement: BASt U5 6494
 Appr.-No. Topple-length-limiting-element: BASt/99 7S 76/HF