



PRODUCT PERFORMANCE – FALL PROTECTION

SIDE PROTECTION

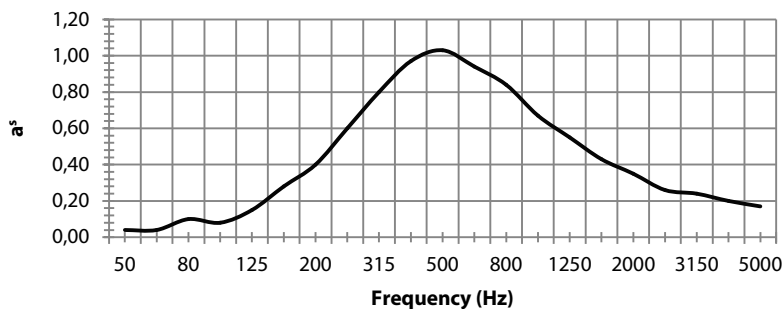
dBarrier has been approved as side protections on scaffolds according to European standard SS-EN 12811-1:2004. The purpose of the standard is certify that a scaffold safety product guarantees a safe work place with safe access suitable for the work being done. This European Standard sets out performance requirements for working scaffolds Tested and certified at SP (Swedish Technical Research Institute), more information can be found at www.sp.se



PRODUCT PERFORMANCE - NOISE

NOISE ABSORPTION

Measurements made at the accredited SP in accordance with ISO 354:2003. The method is a European standard EN ISO 354 and a Swedish standard SS-EN ISO 354. The evaluation is also made at SP according to ISO 11654. The method is a European standard EN ISO 11654 and the Swedish standard SS-EN ISO 11654. Four speaker positions and 6 microphone positions were used which gives 24 different combinations of measurement of reverberation time. Three reverb progressions were used using in an empty room to get an average. Five reverb progressions for each microphone/speaker combination were used for the test subject.



Results

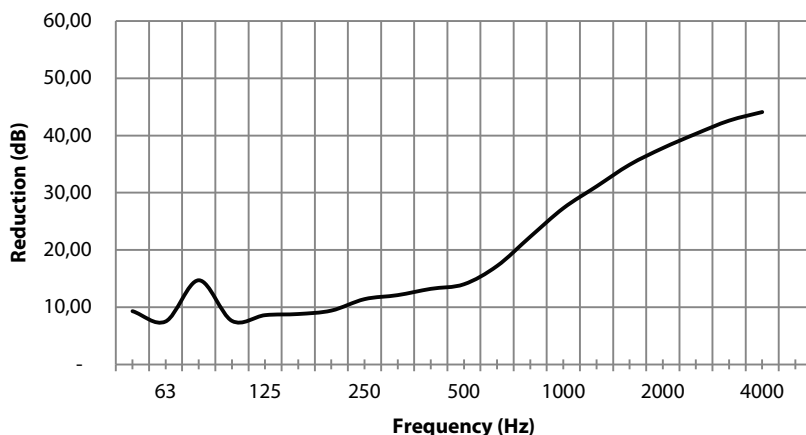
Noise absorption class: D

Noise absorption factor: 0,35

Fig 1. Test results from SP regarding noise absorbency

NOISE REDUCTION

Measurements have been performed at the accredited SP institute in accordance to ISO 140-3:1995 which is the current EU and Swedish standard. The results have been evaluated in terms of scaled sound reduction index in a laboratory, R_w according international standard ISO 717-1:1996 of which SP is accredited to perform. The method is the current EU and Swedish standard.



Results

R_w	21
(C: Ctr)	(-1;-4)
50-3150	(-1;-4)
50-5000	(0;-4)
R average	21,2
Sum. Deviation	28,4
Max. Deviation	7
Frequency	500

Fig. 2, Noise reduction results from SP



PRODUCT PERFORMANCE - THERMAL CONDUCTIVITY

Thermal conductivity were determined according to EN 12667 and thickness according to EN 823 with 250 Pa measuring pressure.

RESULTS

Thermal insulance	1,11 m ² K/W
Thermal conductivity	0,8 W/(m ² K)(surface thermal insulance 0,17 m ² K/W)
Density of heat flow rate	15,7 W/m ²
Temperature difference above specimen	17,4°C



PRODUCT PERFORMANCE - WIND

WIND DURABILITY

The test was performed in three stages to ensure the overall resistance for the dBarrier®. All tests were performed with the same test subject. This provides for a reliable real life simulation. The tests were performed to ensure both wind bursts and on-going strong wind speeds.

The dBarrier® wall is built to last, both in strong bursts of wind as well as strong persistent wind. No wear could be seen on the material, neither the plastics nor the metal fasteners. The only thing that happened during the tests was at the highest wind speeds when the upper and lower fasteners rotated slightly. The conclusion is that wind will not be an obstacle for this product. The eventual breaking point will be the scaffolding system if any.

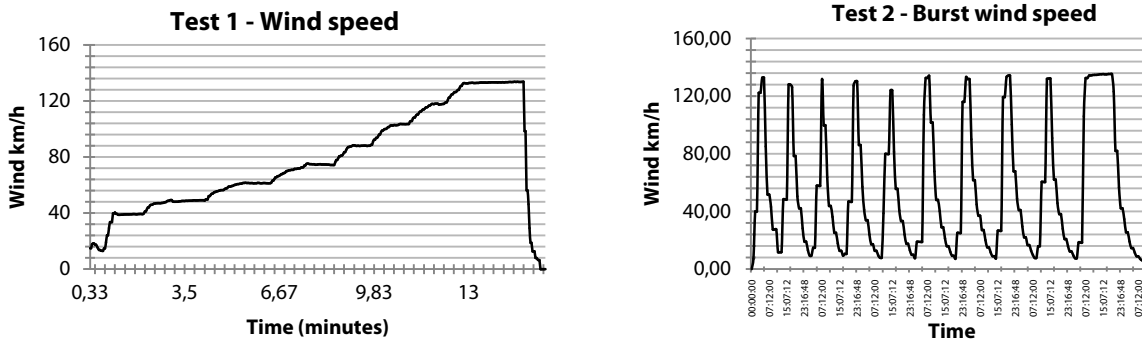


Fig 1. Wind speeds in test 3 & 4, third test were performed with even flow of 104 km/h

	Meters per second	Kilometres per hour	Beaufort
Test 1	15-38	54-137	7-12
Test 2	38	137	12
Test 3	29	104	11

Fig 5. Wind speeds in different formats

