

# VACOSHIELD 3 X 4

Type	VACOSHIELD® 4 x 3 (used for OPM- and SQUID-MEG)
Design	Two layers of soft magnetic alloy 4 m x 3 m x 2.4 m (L x W x H)
Door mechanism	Swing door with pneumatic opening/closing
Weight	≈ 7,500 kg
External flux density during measurement	1 $\mu$ T RMS

3 m x 4 m - 2024	Length	Width	Height
Inside decoration surface	3.90 m	2.90 m	2.38 m
Outside decoration surface	4.52 m	3.52 m	2.87 m
Pit for standard door	4.6 m (min)	3.6 m (min)	138 mm (max)
Pit for level entry door	4.6 m (min)	3.6 m (min)	259 mm (max)

## WARRANTED SHIELDING FACTORS

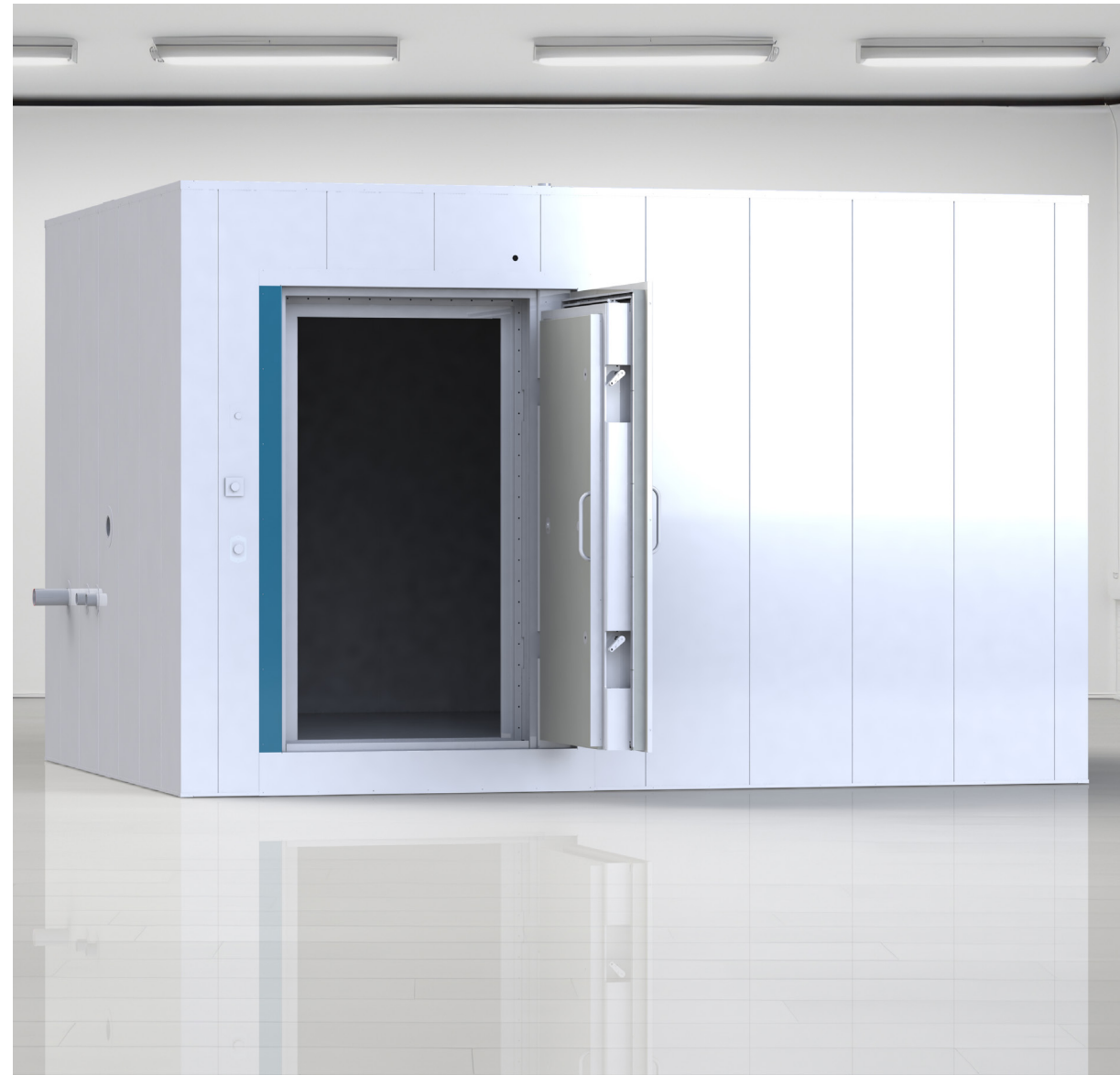
A final test procedure is carried out in accordance with the VAC PR-900 test specification, qualified by default at  $B=1 \mu\text{T RMS}$ . At higher flux densities the shielding factors are significantly higher. The given shielding factor  $S$  is understood as the average value measured for all three axes at the centre of the Magnetically Shielded Room.

The table below provides the minimum expected shielding performance.

f/Hz	Warranted S [abs]	Typical S [abs]
DC	1,000*	> 3,000*
0.01	60	73
0.1	120	164
1	1,000	1,600
10	8,000	> 20,000
100	50,000	>> 50,000

\* Higher values are possible after appropriate demagnetization

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