

Knauf Technical Substantiation Report

Reference: S1-13

Performance: 51dB Rw



Scope

This report outlines the test that has been carried out in order to determine the acoustic performance of the Knauf Safeboard partition described below.

System Build Up

12.5mm Knauf Safeboard

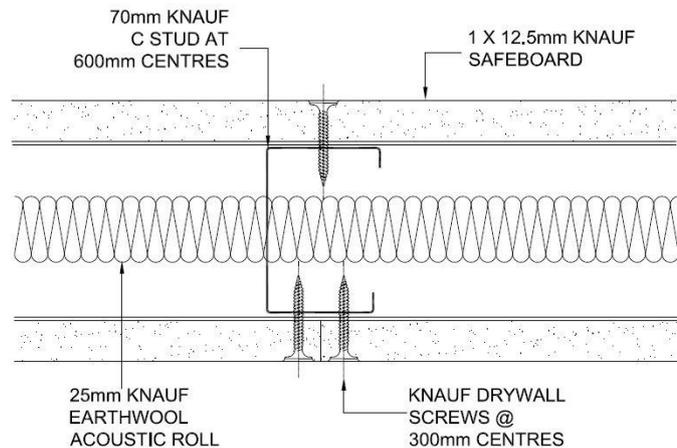
70mm [0.55] Knauf 'C' Stud

12.5mm Knauf Safeboard

25mm Knauf Drywall Screws

25mm Knauf Earthwool Acoustic Roll

97mm Overall Width



System Description

A non-loadbearing Knauf partition system comprising of 70mm [0.55] Knauf 'C' Studs at 600mm centres, faced either side with a single layer of 12.5mm Knauf Safeboard types D and F to EN 520:2004. Screw fixed at 300mm centres using 25mm Knauf Drywall screws incorporating one layer of 25mm Knauf Earthwool Acoustic Roll within the cavity. All joints were staggered and jointed using Knauf Safeboard Joint Filler.

Test Certificate No

245607 L108-053

Supporting Data

A sound insulation test was conducted on a single skin Knauf partition system in accordance with EN ISO 140-3:2005. The system comprised of a single layer of 12.5mm Knauf Safeboard, fixed at 300mm centres with 25mm Knauf Drywall screws, to 70mm [0.55] Knauf C studs at 600mm centres, placed within 72mm Knauf 'U' Channel fixed to the head and base of the test aperture and incorporated one layer of 25mm Knauf Earthwool Acoustic Roll within the cavity. All joints were staggered, taped and jointed. The partition system achieved an acoustic rating of 51dB Rw in accordance with EN ISO 717-1.

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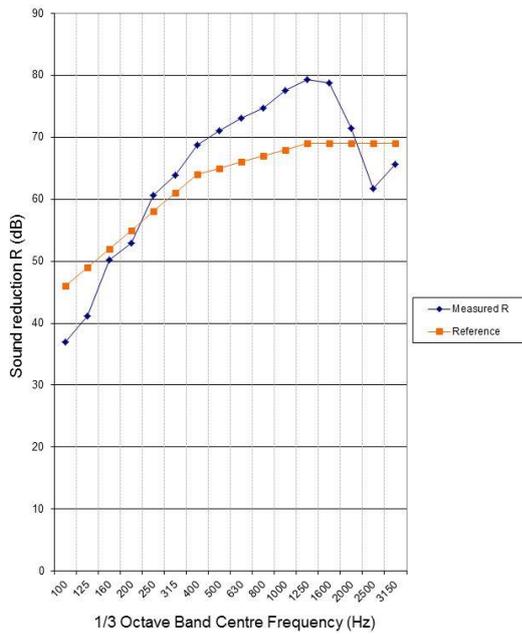
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Measured and reference curves



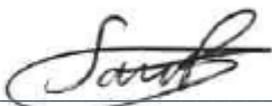
Frequency - 1/3rd Octave band (Hz)	Measured Ri (dB)
100	20
125	31.2
160	35
200	34.9
250	42
315	47
400	49.9
500	53.6
630	55.7
800	58.4
1000	60.9
1250	63.1
1600	64.6
2000	67
2500	68.5
3150	55

Summary table		
Rw (dB)	C	Ctr
51	-4	-12

Conclusion

Therefore, the Knauf Safeboard partition as described in the 'System Build Up' of this report, is suitable for installations where an acoustic rating of 51dB Rw is required, in accordance with BS EN ISO 717-1:1997.

Prepared for and on behalf of Knauf by:



 Technical Support Representative

16/08/18
 Date

Approved on behalf of Knauf Drywall by:



 Fiona Misiri
 Technical Support Team Leader



 Joseph Sargeantson
 Technical Services Director

16/08/18
 Date

Note: The results only relate to the behaviour of the element of construction under the particular conditions of the test. They are not intended to be the sole criteria for assessing the potential acoustic performance of the final installed element in use, nor do they reflect the actual behaviour given site considerations. For Terms & Conditions please visit www.knauf.co.uk

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