

Knauf Technical Substantiation Report

Reference: ILR3-13

Performance: 67dB Rw



Scope

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

System Build Up

2 x 15mm Knauf Soundshield Plus

Twin 70mm [0.55] Knauf 'C' Stud

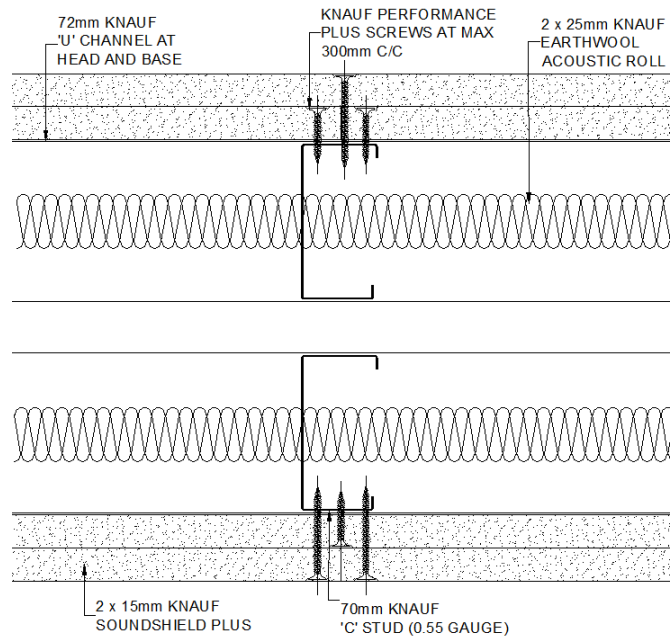
2 x 15mm Knauf Soundshield Plus

25mm Knauf Performance Plus Screws

45mm Knauf Performance Plus Screws

2 x 25mm Knauf Earthwool Acoustic Roll

210mm Overall Width



System Description

A non-loadbearing Knauf partition system comprising of twin 70mm [0.55] Knauf 'C' Studs at 600mm centres faced either side with a double layer of 15mm Knauf Soundshield Plus, types A, D, F and I to EN 520:2004. Screw fixed at 300mm centres using 25mm & 45mm Knauf Performance Plus screws incorporating 2 x 25mm Knauf Earthwool Acoustic Roll with in the cavity. All joints were staggered, taped and jointed.

Test Certificate No

SWW 11 007-01

Supporting Data

A sound insulation test was conducted on a double skin twin frame Knauf partition system in accordance with BS EN ISO 140-3:1995. The system comprised of a double layer of 15mm Knauf Soundshield (now known as Knauf Soundshield Plus), fixed at 300mm centres with 25mm & 45mm Knauf Performance Plus to each side of twin 70mm [0.55] Knauf C Studs at 600mm centres supported by 72mm Knauf 'U' Channel at the head and base. Incorporating 2 x 25mm Knauf Acoustic Partition Roll (now known as Knauf Earthwool Acoustic Roll) within the cavity, all board joints were staggered and taped and jointed, creating a system width of 210mm. The partition system achieved an acoustic rating of 67dB Rw in accordance with BS EN ISO 717-1:1997

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Knauf, Kemsley Fields Business Park, Sittingbourne, Kent ME9 8SR

Technical line: 0800 030 4135 Email: technical@knauf.co.uk Twitter: @KnaufTechnical

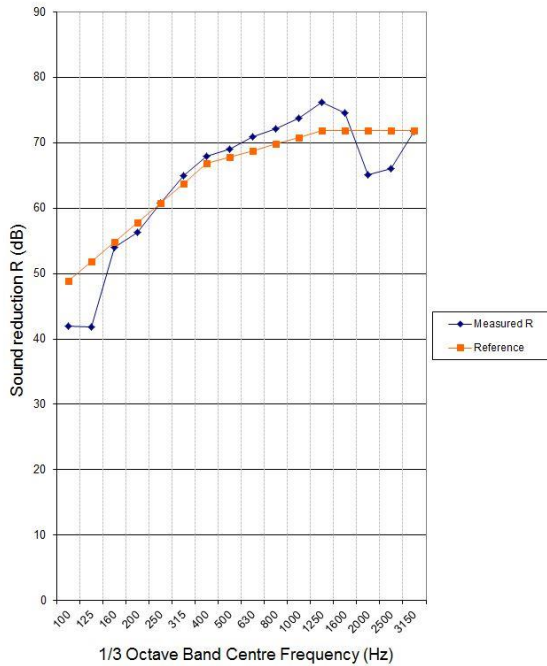
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Measured and reference curves



Frequency - 1/3rd Octave band (Hz)	Measured Ri (dB)
100	42
125	41.8
160	54
200	56.3
250	60.8
315	64.9
400	68
500	69
630	70.9
800	72.1
1000	73.8
1250	76.2
1600	74.6
2000	65.1
2500	66
3150	71.7

Summary table		
Rw (dB)	C	Ctr
67	-4.0	-9.7

Conclusion

Therefore, the Knauf partition as described in the 'System Build Up' of this report, is suitable for installations where an acoustic rating of 67dB Rw is required, in accordance with BS EN ISO 717-1:1997.

Prepared for and on behalf of Knauf by:

Technical Support Representative

15/08/18

Date

Approved on behalf of Knauf Drywall by:

Fiona Misiri
Technical Support Team Leader

Joseph Sargeantson
Technical Services Director

15/08/18

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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