

NEW BUILD BUILDING REGULATIONS COMPLIANCE GUIDE

Separating & internal walls

Find out more at
[soundgoodfactor.co.uk](https://www.soundgoodfactor.co.uk)

ISOover
SAINT-GOBAIN

SEPARATING WALLS

HOW TO COMPLY

There are currently 2 routes to demonstrate compliance with the building regulations below:

- 1 Pre-completion sound testing of as-built properties
- 2 Build to a Robust Detail

PRE-COMPLETION SOUND TESTING

The approach entails engaging an acoustic testing company to attend site and undertake acoustic testing on the nearly completed properties. The number of tests required will depend on the country and on the number and variety of plots on each site.

Any failed tests will require remedial works to be carried out (potentially on a number of plots) and additional tests being undertaken. This process can be time consuming and costly so it is generally agreed that this method of compliance has greater uncertainty (and is likely to be higher cost) compared to the use of Robust Details.

BUILDING WITH ROBUST DETAILS

The Robust Details scheme was developed as an alternative to pre-completion testing for demonstrating compliance with Part E of building regulations (and now also performs this function for Section 5 in Scotland).

It entails registering your build plots as one of the pre-tested construction types in the Robust Details Handbook and then building the plots to the required specifications, also detailed in the handbook.

Isover has been a strong supporter of the Robust Details scheme and have certified more proprietary details than any other materials manufacturer. All of Isover's masonry details are cost effective solutions which do not require parge coating.

As regulations change with time so have Isover's Robust Details. To reflect the inclusion of party wall bypass in the UK's thermal building regulations, Isover was the first manufacturer to certify Robust Details which achieve a U-value of zero under these regulations.

Now **E-WM-17**, **E-WM-20** and **E-WM-24** featuring Isover's RD Party Wall Roll are some of the most popular masonry robust details. They all exceed the England and Wales Part E building regulations by +5dB. This high performance also attracts 3 credits in The Code for Sustainable Homes and The Home Quality Mark.

For more details on Robust Details and to download the handbook visit www.robustdetails.com.

REGULATION REQUIREMENTS

	Latest regulation documents	Separating Wall minimum airborne sound insulation, dB.
England	Approved document part E - The resistance to the passage of sound - 2003 edition incorporating 2004, 2010, 2013 and 2015 amendments.	$45 D_{nT,w} + C_{tr}$
Wales	Approved document part E - The resistance to the passage of sound - 2003 edition incorporating 2004 & 2010 amendments.	$45 D_{nT,w} + C_{tr}$
Scotland	The Technical Handbook 2016 Domestic - Section 5 - Noise and The Technical Handbook 2016 Non-Domestic - Section 5 - Noise	$56 D_{nT,w}$

INTERNAL WALLS

HOW TO COMPLY

In the case of internal walls, compliance is demonstrated by selecting and building a wall build-up whose performance has been verified by third party testing.

ISOVER APR 1200

Isover APR 1200 has been tested in the market leading range of acoustic partition systems detailed in the British Gypsum White Book. For peace of mind, all White Book systems are backed-up by the SpecSure system warranty, which is a lifetime performance warranty. In order to ensure the performance of the system, it's important to use all the correct system components and install the system following the manufacturers guidance.

A selection of these tested systems can be found on the next page, but there are a vast array of different systems available to suit varying specifications of acoustic and fire performance.

For further advice on matching the right system to your particular needs contact our Technical Advice Centre on:

Tel: 0115 945 1143

E-mail: isover.enquiries@saint-gobain.com

REGULATION REQUIREMENTS

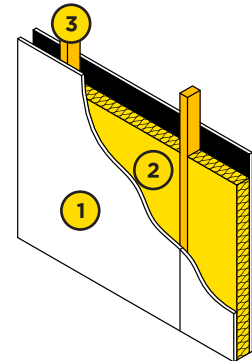
	Latest regulation documents	Internal Wall minimum airborne sound insulation, dB (Rw)*
England	Approved document part E - The resistance to the passage of sound - 2003 edition incorporating 2004, 2010, 2013 and 2015 amendments.	40
Wales	Approved document part E - The resistance to the passage of sound - 2003 edition incorporating 2004 & 2010 amendments.	40
Scotland	The Technical Handbook 2016 Domestic - Section 5 - Noise	40
	The Technical Handbook 2016 Non-Domestic - Section 5 - Noise	43

*Some exclusions to this requirement exist depending on the nature of the wall and the adjoining rooms.

INTERNAL WALLS

INTERNAL PARTITIONS - TIMBER STUDS

- 1 Gyproc WallBoard / SoundBloc
- 2 Isover Acoustic Partition Roll (APR 1200) between studs
- 3 Timber studs

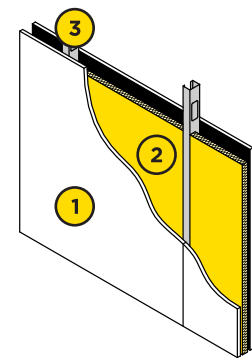


dB (Rw) achieved	Partition thickness (mm)	Stud (mm)	Insulation within stud (mm)	WallBoard
41	88	63mm x 38mm timber stud	Acoustic Partition Roll APR 1200 65mm	1 x 12.5mm Gyproc Wallboard
44	93	63mm x 38mm timber stud	Acoustic Partition Roll APR 1200 50mm	1 x 15mm Gyproc Wallboard
56	141*	75mm x 38mm timber stud	Acoustic Partition Roll APR 1200 50mm	2 x 12.5mm Gyproc SoundBloc
59	157*	75mm x 38mm timber stud	Acoustic Partition Roll APR 1200 50mm	2 x 12.5mm Gyproc SoundBloc

* 56dB and 59dB timber stud partitions use Resilient Bars to isolate the plasterboard from the stud.

INTERNAL PARTITIONS - METAL STUDS

- 1 Gyproc WallBoard / SoundBloc
- 2 Isover Acoustic Partition Roll (APR 1200) between studs
- 3 Gypframe metal studs



dB (Rw) achieved	Partition thickness (mm)	Stud (mm)	Insulation within stud (mm)	WallBoard
40	75	Gypframe 48 S 50 'C' stud	Acoustic Partition Roll APR 1200 25mm	1 x 12.5mm Gyproc Wallboard
44	102	Gypframe 70 S 50 'C' stud	Acoustic Partition Roll APR 1200 50mm	1 x 15mm Gyproc Wallboard
56	132	Gypframe 70 S 50 'C' stud	Acoustic Partition Roll APR 1200 50mm	2 x 15mm Gyproc SoundBloc
59	208	Gypframe 146 S 50 'C' stud	Acoustic Partition Roll APR 1200 50mm	2 x 15mm Gyproc SoundBloc

The tables above shows a selection of system details to illustrate performance. For additional options, or for further guidance please contact our Technical Advice Centre on 0115 945 1143