

Acoustic Design Review (Enhanced Sound Insulation)

ADDRESS:

549 Uxbridge Road Hayes UB4 8HP

PROPOSAL:

Conversion (change of use) of the property to Sui-Gen HMO.

June 2025

Revision (A)

1.0 INTRODUCTION

We have been commissioned to review the proposed development and define the acoustic requirements in order to satisfy the enhanced sound insulation requested by the LPA.

In accordance with the requirements of London Borough of Hillingdon, this report provides a summary of the relevant acoustic design criteria, based on guidance such as BS 8233 (2014) 'Guidance on sound insulation and noise reduction for buildings' and the requirements of Approved Document E 'Resistance to the passage of sound' (ADE), 2003 edition (incorporating 2015 amendments) which is an approved publication for the purposes of The Building Regulations 2010.

CDM Regulations

Although this report may reference specific products and/or manufacturers, these are included as a suitable example only and there will normally be numerous alternative products that could be used.

The final specifications for construction materials and methods used would be prepared by others. Any potential health and safety issues associated with specified materials and construction methods must be mitigated based on all available information including that from the manufacturer and/or supplier.

Some of the risks associated with the use of materials and construction methods commonly suggested in relation to achieving acoustic requirements include:

- manual handling of heavy blockwork and boards;
- handling of hazardous substances such as mineral wool, which can be an irritant;
- noisy construction works, where quieter alternatives should be used, and
- protection provided to site operatives where necessary

2.0. SITE

Site Location

Site Address: **549 Uxbridge Road Hayes UB4 8HP**

Local Planning Authority: **London Borough of Hillingdon**

Site Description

The application site is located on the southern side of Uxbridge Road in Hillingdon and contains a large two-storey detached dwellinghouse. The surrounding area is predominantly residential in nature with dwellings along this road being of a similar scale and design. In terms of relevant planning constraints, the property is neither located within a Conservation Area, subject to Article 4 direction, nor the site of a Listed Building.

3.0. PROPOSED DEVELOPMENT

The proposed development involves a 'material change of use' for conversion of the property into a large HMO.

4.0. CASE STUDY

We carried out a research on similar planning applications for HMO conversion in the Hillingdon council. We did not find any case to use for a reference. Notwithstanding the above, mitigation measures are proposed to meet and sometimes exceed the recommended acoustic levels provided in UK Building regulations Part E. The proposed sound insulation is provided in good faith and hopefully the LPA will treat it as an extra bonus demonstrating a high-quality HMO.

5.0. ACOUSTIC REQUIREMENTS

Noise related Building Regulations ADE, details of the Local Planning Authority noise policy, and British Standards which are considered potentially relevant / applicable to the proposed residential development are provided in the following sections:

5.1. Building Regulations Approved Document E

General

The design requirements for the internal acoustics of dwelling-houses, flats and rooms for residential purposes are based on the requirements detailed in ADE and these performance standards are presented below:

Part E1 - sound insulation to be achieved by separating walls and floors between adjacent flats or rooms for residential purposes and common areas;

Part E2 - sound insulation of internal walls and floors within a unit;

Part E3 - control of reverberation in common areas.

Part E1

The sound insulation performance standards specified in ADE, for walls and floors that have a separating function between apartments formed by a material change of use, are presented in Table 1, below:

Element	Building Regulations Part E – Dwellinghouses and Flats	
	Airborne Sound Insulation $D_{nT,w} + C_{tr}$ dB (Minimum Value)	Impact Sound Insulation $L'_{nT,w}$ dB (Maximum Value)
Wall	NewBuild $D_{nT,w} + C_{tr} \geq 45$ dB Conversion $D_{nT,w} + C_{tr} \geq 43$ dB	N/A
Floor	NewBuild $D_{nT,w} + C_{tr} \geq 45$ dB Conversion $D_{nT,w} + C_{tr} \geq 43$ dB	NewBuild $L'_{nT,w} \leq 62$ dB Conversion $L'_{nT,w} \leq 64$ dB

Table 1

The above performances should also be achieved between apartments and any other part of the same building, and dwellings in an adjacent building.

Part E1 also identifies requirements for doors onto common areas, which should be designed to achieve 29dBRw, or ensure that they have a minimum mass of 25kg/m² plus good perimeter sealing, including the threshold where practical.

Part E2

ADE confirms that the internal wall and floor constructions within rooms for residential purposes, whether purpose built or formed by material change of use, need to achieve a laboratory value of at least 40dBRw. This is based on manufacturer's laboratory test data and does not require to be checked on site.

Part E3

In addition to the above sound insulation performance standards, a further requirement of Approved Document E is to control reverberation times, to a reasonable level, in common internal parts of buildings containing flats or rooms for residential purposes. This can be achieved by either of the following methods:

- Method A: Cover a specified area with an absorber of an appropriate class that has been rated according to BS EN ISO 11654:1997;
- Method B: Determine the minimum amount of absorptive material using a calculation procedure in octave bands. This method is intended only for corridors, hallways and entrance halls and is not well suited to stairwells.

6.0. ACOUSTIC DESIGN OBJECTIVES

Meeting the enhanced requirements (Table 2) is not straightforward. As well as specifying separating floors and wall construction attention to 'Flanking' sound transmission is extremely important.

It is also important when selecting products to allow for the difference between laboratory test results and site test results. The difference can be up to 10dB. Therefore, to achieve a sound reduction of 53 DnTw + Ctr dB on site, a laboratory tested Rw value must be increased by 10dB.

Element	Onsite performance target (E1+5) in Dwelling-houses and Flats	
	Airborne sound insulation (Minimum values)	Impact sound insulation (Maximum values)
Wall	Conversion $D_{nT,w}+C_{tr} \geq 48\text{dB}$	N/A
Floor	Conversion $D_{nT,w}+C_{tr} \geq 48\text{dB}$	Conversion $L'_{nT,w} \leq 59\text{dB}$

Table 2

Element	Onsite performance target (E1+10) in Dwelling-houses and Flats	
	Airborne sound insulation (Minimum values)	Impact sound insulation (Maximum values)
Wall	Conversion $D_{nT,w}+C_{tr} \geq 53\text{dB}$	N/A
Floor	Conversion $D_{nT,w}+C_{tr} \geq 53\text{dB}$	Conversion $L'_{nT,w} \leq 54\text{dB}$

Table 3

7.0. ACOUSTIC DESIGN PROPOSAL

Performance specifications will be reflecting a pragmatic approach without compromising on the building's intended use.

The following sections describe the acoustic recommendations for the different areas and the advantages that maybe attained through implementation. The basis for all design recommendations within this report is Approved Document E (ADE) 2003 of the 2010 Building Regulations.

7.1. ASSESSMENT OF FLOOR/CEILING CONSTRUCTIONS

Separating Floor Part E1 (table 1)

The below construction would be expected to meet the standard requirements of Approved Document E (ADE) 2003 of the 2010 Building Regulations for airborne and impact sound insulation in accordance with table 1: (See Appendix A-B)

Floor type E1

- Final walking surface and floor finish
- 6-12mm fibre cement board e.g. STS board, CEMBLOC, NoMorePLy, Hardie Backer, EuroForm or similar (optional for shower areas)
- 28mm composite acoustic overlay board e.g. CELLECTA DECKfon26T, Hush-Panel 28, dB Panel 28, Karma Overly 28, CMS Danskin SoundDeck 26, JCW Acoustic Deck 28, IKoustic Mute Deck 28, Icopal Deck18, Isocheck 28T, Trim Defender28, ChipPanel 28F, ProSound SoundDeck28, Proctor Dynamic Deck 26, Platform Floor 25,
- 15mm timber floor board or existing floor board (density 600 kg/m³), all gaps sealed with suitable flexible mastic
- Existing solid timber joists, assumed 200mm
- 100mm 45kg/m³ mineral wool (RWA45 or similar) between joists
- 16mm standard resilient bar or equivalent acoustic hanger or clip system (optional)
- 2x15mm acoustic plasterboard, all joints staggered and sealed

7.2. ASSESSMENT OF WALL CONSTRUCTIONS

Separating Wall Part E1 (table 1)

The below construction would be expected to meet the standard requirements of Approved Document E (ADE) 2003 of the 2010 Building Regulations for airborne and impact sound insulation. (See Appendix C-D)

Wall type E1

- 2 layers of 12.5mm acoustic plasterboard
- 100mm timber studs @600 ctrs
- 50mm Isover Acoustic Partition Slab Or Rockwool RWA45 with 45kg/m3 density
- 2 layers of 12.5mm acoustic plasterboard
- 1 layer of 12mm fibre cement board tile backer e.g. Hardie Backer (optional for shower areas)

When upgrading the separating wall, it is essential to Seal the perimeter with tape or sealant. With the implementation of the above alterations, it would be anticipated that the requirement of Building Regulations requirements would be achieved for both airborne and impact sound insulation performance.

Separating Wall type C between HMO rooms and Adjacent Building

The application property is a detached building that can mitigate the internal sound transmission between two neighbouring properties to an acceptable level. It would appear that the party walls between the development and the adjacent buildings are masonry constructions.

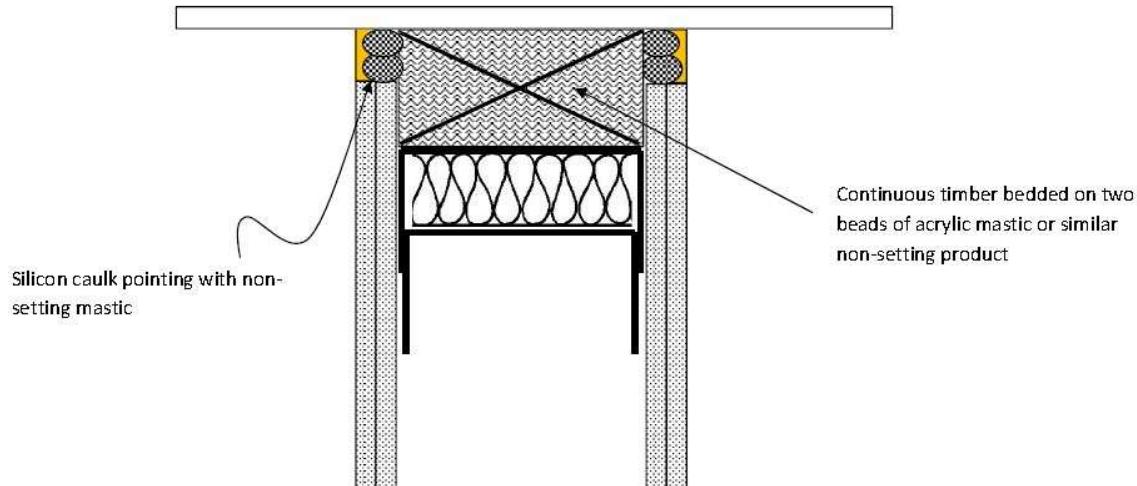
Assuming that the combined width of the masonry wall is at least 220mm, then the requirement of ADE could be achieved on site. However, it would be a marginal situation depending on the internal finishes in the adjacent buildings.

To achieve an enhanced sound insulation value above the Building Regulations value, it is recommended that a lining consisting of a single layer of 12.5mm thick BG SoundBloc lining is fixed to one side.

Further Considerations

To maintain the expected sound insulation for separating walls, the following points need to be complied with;

- Each lining to be installed with staggered joints;
- Ensure the absorptive material within partitions and linings to be unfaced mineral wool batts or quilt (which may be wire reinforced), minimum density 10kg/m³ and covers the whole wall area;
- Ensure there are no direct connections between the two leaves other than the acoustic braces;
- Seal all joints in the outer layer with tape or caulk with sealant;
- Stagger the position of sockets on opposite sides of the separating wall and use a similar thickness of cladding behind the socket box. Do not locate sockets back to back. A minimum edge to edge stagger of 200mm is recommended. Do not chase plasterboard;
- Stairs should not be directly fixed to any separating wall.
- Control flanking transmission from walls and floors connected to the separating wall. This would require a review of the junction details as prepared by the architect.



Internal Walls type E2

The following internal wall construction is proposed:

- 100mm Timber Stud Construction;
- 1 layer of 12.5mm BG SoundBloc each side of Timber Stud.

This wall construction is British Gypsum system A206033 and has a laboratory measured performance of 40dBRw, and therefore, complies with ADE.

To maintain a reasonable standard of privacy within dwellings it is advised that all internal walls are built to a minimum sound insulation performance of 45 dB Rw including bedroom to corridor and bathroom walls. This includes the +5 dB design tolerance in line with the planning requirements.

Internal Walls type E2+5

- 1 layer of 12.5mm acoustic plasterboard.
- 100mm Timber Stud Construction
- 50mm RWA45 Rockwool sound insulation (45kg/m³ density)
- 2 layers of 12.5mm acoustic plasterboard.
- 1 layer of 12mm fibre cement board tile backer e.g. Hardie Backer (optional for shower areas)

Doors

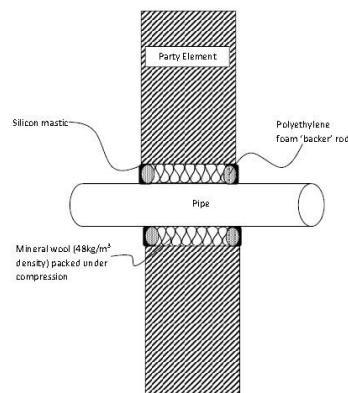
Front doors of the HMO rooms to corridors and hallways should provide a minimum sound insulation of 29dBRw, which could be achieved using a solid core door fitted with appropriate compressible rubber acoustic seals to the head, jambs and threshold.

There are no specific requirements in relation to acoustics for internal doors within a single unit.

Soil Water Pipe Risers

ADE states that where pipes run between residential units they should be enclosed for their full height in each room.

The enclosure should be constructed from 2 layers of 12.5mm thick BG SoundBloc supported by an independent 'I' stud with 25mm acoustic insulation in the cavity. In addition, all pipes should be resiliently mounted.



8.3 ASSESSMENT OF THE INTERNAL FINISHES

In order to meet the requirements of Part E3 of ADE, the reverberation time in all common areas (e.g. corridors, stairwells) should be controlled to a reasonable level. This is usually achieved by adding an absorptive ceiling and carpet to all common areas.

The ceiling should be at least absorption Class C. Alternatively, acoustically absorbent wall panels could be considered.

However, based on similar previous projects, Building Control departments often accept the inclusion of carpets only as a suitable method for controlling reverberation times in the corridors. This will need to be confirmed with the Building Control department.

9.0. CONCLUSIONS

We carried out a research on similar planning applications for HMO conversion in the Hillingdon council. We did not find any case to use for a reference. The LPA has granted planning permission to similar HMO conversions in the area. It is assessed that the sound and noise levels on the application site are quite similar to all other similar HMO conversions and there is nothing significantly different.

Notwithstanding the above, mitigation measures are proposed to meet and sometimes exceed the recommended acoustic levels provided in UK Building regulations Part E. The proposed sound insulation is provided in good faith and hopefully the LPA will treat it as an extra bonus demonstrating a high-quality HMO.

The proposed construction details are the examples of construction methods based on available literature in order to satisfy the requirement. It is recommended that a full acoustic assessment is carried out in Building Control stage, all the mitigation measures in the report are reviewed and construction details/materials/products are updated in order to improve the acoustic levels, mitigate the noise impacts and enhance the acoustic proof of the proposed accommodation.

It is recommended to contact the manufacturers for various available products and systems in the market in order to obtain a confirmation of the accurate product performance, recommended installation methods, and the product effectiveness in order to satisfy the required acoustic level. The final construction detail can then be selected based on the product availability, site practicality and cost-effectiveness.

If it is deemed necessary by the LPA, further acoustic assessments/requirements can be provided or secured via a suitable pre-occupation planning condition so that the planning approval can be granted.

Appendix - A

Acoustic performance

Table 1 – Recommended laboratory performance to meet requirements of Building Regulations Approved Document E (England and Wales)

Where applicable	Minimum airborne sound insulation $D_{air,w} + C_0$ (site test result)	Recommended performance $R_a + C_0$ (laboratory test result)	Maximum impact sound transmission $I'_{air,w}$ (site test result)	Recommended performance $I_{air,w}$ (laboratory test result)
Separating walls between new homes	45dB	54dB	-	-
Separating walls between purpose-built rooms for residential purposes	43dB	52dB	-	-
Separating walls between rooms created by a change of use or conversion	43dB	52dB	-	-
Separating floors between new homes and purpose-built rooms for residential purposes	45dB	54dB	62dB	57dB - 52dB (depending on construction method)
Separating floors between rooms created by a change of use or conversion	43dB	52dB	64dB	59dB - 54dB (depending on construction method)

Table 2 – Recommended laboratory performance to meet requirements of Technical Handbook Section 5 (Scotland)

Where applicable	Minimum airborne sound insulation $D_{air,w}$ (site test result)	Recommended performance R_a (laboratory test result)	Maximum impact sound transmission $I'_{air,w}$ (site test result)	Recommended performance $I_{air,w}$ (laboratory test result)
Separating walls between new homes, purpose-built rooms for residential purposes and conversions (not including traditional buildings)	56dB	63dB	-	-
Separating walls between rooms created by a change of use or conversion (traditional buildings)	53dB	60dB	-	-
Separating floors between new homes, purpose-built rooms for residential purposes and conversions (not including traditional buildings)	56dB	63dB	56dB	51dB - 46dB (depending on construction method)
Separating floors between rooms created by a change of use or conversion (traditional buildings)	53dB	60dB	58dB	53dB - 48dB (depending on construction method)

¹ Definition of traditional buildings:

A building or part of a building of a type constructed before or around 1919;

a) using construction techniques that were commonly in use before 1919; and

b) with permeable components, in a way that promotes the dissipation of moisture from the building fabric.

Good practice specification guidance

British Gypsum's systems are designed and tested to meet every performance requirement and are fully supported by our SpecSure® lifetime system warranty.

This means that when our systems are installed following our guidance they will achieve every performance claim we make, and if they don't then we'll put it right. To maximise the performance achieved on site, consider the following good practice specification guidance:

- Consider flanking transmission at the design stage and ensure construction detailing is specified to eliminate, or at least to minimise, any downgrading of the acoustic performance. The sound insulation values quoted in system performance tables are laboratory values and the practicalities of construction will mean that acoustic performances measured in the laboratory will be difficult to achieve on site



- Small openings such as gaps, cracks or holes will conduct airborne sounds and can significantly reduce the sound insulation of a construction. For optimum sound insulation a construction must be airtight
- When designing spaces requiring separation by sound insulating floors and ceilings abutting structural steelwork, consideration should be given to the potential loss of sound insulation performance through the steelwork

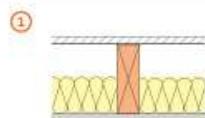
Appendix - B

Loadbearing timber joist floors performance (continued)

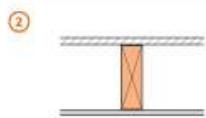
Ceiling indirectly fixed to new or existing solid timber joist floors

Table 4a - Solutions to satisfy the requirements of BS EN 1365-2

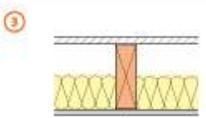
For details of when to specify fire resistance using EN Refer to C02.501. P05



22mm t&g¹ (softwood or chipboard) floor boarding over minimum 195mm x 38mm timber joists at 600mm centres. Gyphrame R82 SureFix Bars fixed to underside of joists at 450mm centres and at perimeter with ceiling linings as in table fixed into the bars only. 100mm Isover Acoustic Partition Roll (APR 1200) in the cavity.



22mm t&g¹ (softwood or chipboard) floor boarding over minimum 195mm x 38mm timber joists at 600mm centres. Gyphrame R81 Resilient Bars fixed to underside of joists at 450mm centres and at perimeter with ceiling linings as in table fixed into the bars only.



22mm t&g¹ (softwood or chipboard) floor boarding over minimum 195mm x 38mm timber joists at 600mm centres. Gyphrame R81 Resilient Bars fixed to underside of joists at 450mm centres and at perimeter with ceiling linings as in table fixed into the bars only. 100mm Isover Spacesaver Ready-Cut in the cavity.

Detail	Nominal floor depth mm	Board type	Ceiling lining thickness mm	Maximum loadbearing ratio	Sound insulation		System reference
					Airborne R _a dB	Impact I _{IC} dB	
30 minutes fire resistance EN							
①	240	Gyproc WallBoard	1 x 12.5	100%	41	76	C206006
60 minutes fire resistance EN							
②	258	Gyproc FireLine	2 x 12.5	100%	45	72	C016031
③	263	Gyproc SoundBloc	2 x 15	100%	54	60	C206009

► For further assistance in choosing the right solution for your project, try the White Book System Selector; an online tool that enables quick and easy filtering by performance criteria. It provides system specific information downloads including BIM (Revit) objects. Go to british-gypsum.com

¹For non t&g floors, overlay with 6mm plywood and ensure all joints are staggered.

NB The fire resistance and sound insulation performances are for imperforate partitions, walls and ceilings incorporating boards with all joints taped and filled, or skimmed according to British Gypsum's recommendations. The quoted performances are achieved only if British Gypsum and Saint-Gobain Isover components are used throughout, and the Company's fixing recommendations are strictly observed. Any variation in the specifications should be checked with British Gypsum.

NB Where boards are fixed direct to timber joists, British Gypsum Drywall Screws should be used as opposed to nail-fixing to minimise the risk of fixing defects occurring.

Appendix - C

GypWall performance

Acoustic performance

Table 1 — Sound insulation performance for residential specification

Approved Document E (England and Wales)	On-site		Laboratory ¹	
	$D_{st,w} + Ctr$ dB	Minimum solution $(R_w + C_s)$ dB	Recommended solution $(R_w + C_s)$ dB	
Separating walls between new homes	45	(49)	(54)	
Separating walls between purpose-built rooms for residential purposes and rooms created by a change of use or conversion	43	(47)	(52)	
Technical Standards Section 5 (Scotland)	On-site		Laboratory ¹	
	$D_{st,w} + Ctr$ dB	Minimum solution R_w dB	Recommended solution R_w dB	
Separating walls between new homes, purpose-built for residential purposes and conversions (not including traditional buildings ²)	56	60	63	
Separating walls between rooms created by a change of use or conversion (traditional buildings ²)	53	57	60	

¹ Definition of traditional buildings - A building or part of a building of a type constructed before or around 1919:

a) using construction techniques that were commonly in use before 1919; and

b) with permeable components, in a way that promotes the dissipation of moisture from the building fabric.

² Minimum solutions provide little or no margin of safety to allow for reduction in performance due to flanking transmission. Recommended solutions have greater potential to satisfy the requirements of Building regulations.

Good practice specification guidance

British Gypsum's systems are designed and tested to meet every performance requirement and are fully supported by our SpecSure® lifetime system warranty.

This means that when our systems are installed following our guidance they will achieve every performance claim we make, and if they don't then we'll put it right.

To maximise the performance achieved on site, consider the following good practice specification guidance:



- Consider flanking transmission at the design stage and ensure construction detailing is specified to eliminate, or at least to minimise, any downgrading of the acoustic performance.
- Small openings such as gaps, cracks or holes will conduct airborne sounds and can significantly reduce the sound insulation of a construction. For optimum sound insulation a construction must be airtight
- When designing the layout of rooms requiring separation by sound insulating walls abutting structural steelwork, consideration should be given to the potential loss of sound insulation performance through the steelwork
- Deflection heads, by definition, must be able to move and, therefore, achieving an airtight seal is very difficult without incorporating sophisticated components and techniques. Air leakage at the partition heads will have a detrimental effect on acoustic performance of any partition. Where acoustic performance is a key consideration, steps must be taken to minimise this loss of performance
- A common mistake made when designing a building is to specify a high performance element and then incorporate a lower performing element within it; for example, a door within a partition. Where the difference between insulation is relatively small (7dB or less), there needs to be a comparatively large area of the lower insulation element before the overall sound insulation is significantly affected. However, where there is a greater difference in sound insulation performance between the two elements, this would usually result in a greater reduction of overall sound insulation performance

Appendix - D

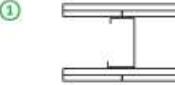
GypWall classic
Partitions
CD4

GypWall classic performance (continued)

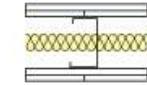
70mm Gypframe 'C' Studs - double layer board linings

Table 7a — Solutions to satisfy the requirements of BS EN 1364-1

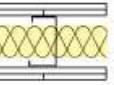
For details of when to specify fire resistance using EN Refer to CD2, SD1, P05



Two layers of board each side of 70mm Gypframe 'C' Studs at 600mm centres. Linings as in table.



Two layers of board each side of 70mm Gypframe 'C' Studs at 600mm centres, 25mm Isover Acoustic Partition Roll (APR 1200) in the cavity. Linings as in table.



Two layers of board each side of 70mm Gypframe 'C' Studs at 600mm centres, 50mm Isover Acoustic Partition Roll (APR 1200) in the cavity. Linings as in table.

► Refer to GypWall robust and GypWall extreme sections for single layer Severe Duty solutions

Detail	Partition thickness mm	Board type	Lining thickness mm	Max height ¹ mm	Sound insulation R_{st} dB		Duty rating	Approx. weight kg/m ²	System reference	
					Any ² finish	Skim ³ only			Any ² finish	Skim ³ only
30 minutes fire resistance [EN]										
①	122	Gyproc WallBoard	2 x 12.5	4600	45	-	Severe	35	A206015	-
①	122	Outer layer Glasroc H maxcess + inner layer Gyproc WallBoard	1 x 12.5 + 1 x 12.5	4600	45	-	Severe	39	H206015	-
②	122	Gyproc WallBoard	2 x 12.5	4600	49	-	Severe	35	A206047	-
60 minutes fire resistance [EN]										
①	122	Gyproc SoundBloc	2 x 12.5	4600	49	-	Severe	43	A206166	-
③	122	Gyproc WallBoard	2 x 12.5	4000	50	-	Severe	35	A206142	-
③	122	Outer layer Glasroc H maxcess + inner layer Gyproc WallBoard	1 x 12.5 + 1 x 12.5	4000	50	-	Severe	39	H206142	-
②	122	Gyproc SoundBloc	2 x 12.5	4000	52	-	Severe	43	A206198	-
③	122	Gyproc SoundBloc	2 x 12.5	4000	53	-	Severe	44	A206230	-
①	132	Gyproc WallBoard	2 x 15	4900	46	47	Severe	42	A206016	A2060165
②	132	Gyproc WallBoard	2 x 15	4000	50	-	Severe	42	A206048	-
90 minutes fire resistance [EN]										
①	132	Gyproc SoundBloc	2 x 15	4000	51	52	Severe	51	A206167	A2061675
②	132	Gyproc SoundBloc	2 x 15	4000	54	55	Severe	51	A206199	A2061995
③	132	Gyproc SoundBloc	2 x 15	4000	56	57	Severe	52	A206231	A2062315
120 minutes fire resistance [EN]										
①	122	Gyproc Fireline	2 x 12.5	4200	46	-	Severe	40	A206079	-
②	122	Gyproc Fireline	2 x 12.5	4000	49	-	Severe	40	A206111	-
③	122	Gyproc FireLine	2 x 12.5	4000	50	-	Severe	40	A206144	-
①	132	Gyproc Fireline	2 x 15	4900	46	47	Severe	47	A206251	A2062515
②	132	Gyproc Fireline	2 x 15	4300	50	-	Severe	49	A206253	-
► For further assistance in choosing the right solution for your project, try the White Book System Selector; an online tool that enables quick and easy filtering by performance criteria. It provides system specific information downloads including BIM (Revit) objects. Go to british-gypsum.com										
<p>¹The maximum heights quoted are limited by the fire safety field of application or by limiting deflection of L/240 at 200 Pa, whichever is the more onerous. ²Sound insulation performance for partitions finished using jointing or plaster skim. ³Sound insulation performance for partitions finished with a 2mm skim finish of Thistle MultiFinish.</p> <p>NB The fire resistance and sound insulation performances are for imperforate partitions, walls and ceilings incorporating boards with all joints taped and filled, or skimmed according to British Gypsum's recommendations. The quoted performances are achieved only if British Gypsum and Saint-Gobain Isover components are used throughout, and the Company's fixing recommendations are strictly observed. Any variation in the specifications should be checked with British Gypsum.</p> <p>NB For heights between 4200mm and 8000mm, Gypframe Deep Flange Floor & Ceiling Channel should be used at base and at head (subject to deflection criteria).</p>										

CD4, SD2, P15

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