OPERATING SCHEDULE Royal College of Obstetricians and Gynaecologists (RCOG) 10 – 18 Union Street, London, SE1 1SX

RCOG will ensure that its building and the facilities it provides are regularly maintained. There will be free water available to all visitors.

A) The Prevention of Crime and Disorder

- 1. A CCTV system be installed at the premises and be maintained in good working order and be continually recording at all times the premises are in use under the licence. The CCTV system must be capable of capturing a clear facial image of every person who enters the premises.
- 2. All CCTV to be kept for a period of 31 days and shall on request be made immediately available to officers of the police and the council in that there will be a member of staff present at all times to operate the CCTV for viewing and downloading to a removable device.
- 3. All staff involved in the sale or supply of alcohol are trained in their responsibilities under the Licensing Act 2003 and training records to be kept and updated every 6 months and shall, upon request, be made immediately available to officers of the police and the council.
- 4. Reception staff will be on site from 8am-5pm.
- 5. Once the building is vacated by staff and visitors, the building will be secured by an alarmed system connected to the police.
- 6. Where an event requires additional security i.e. because of the number of delegates on site, RCOG will ensure this is arranged before the event takes place.
- 7. Events taking place on the premises are organised by RCOG or the on-site sales team and staff from either or both parties will be on site for the duration of the event.
- 8. Alcohol is not sold over the counter at any event.
- 9. The RCOG on site catering and sales are managed by their contractor Graysons whose staff will be trained in the laws related to under age sales and that training shall be documented.
- 10. For non RCOG events SIA security will be provided with minimum of 2 and employed at a ratio of 1:150 guests.
- 11. Substantial food and suitable beverages other than intoxicating liquor will be available during all events within the permitted hours or allocated areas of the building where intoxicating liquor is sold or supplied.
- 12. With the exception of the ground floor café (which will trade between the hours of 1100 and 2100 daily) licensable activities will only be available to:
 - a) Staff and members or RCOG and their bona fide guests;
 - b) Persons attending a pre-booked event/meeting to which members of the general public are not permitted on a walk in basis.
- 13. There will be no sales of alcohol for consumption off the premises.

B) Public Safety

- 1. There will be RCOG trained First Aid Officers on site from 8am-1700 Monday-Friday. For events taking place after and managed by the on-site catering company Graysons. It is the RCOG's responsibility to ensure that all Frist Aid Officers undertake regular training.
- 2. First Aid suppliers and equipment will be regularly checked and maintained.
- 3. Regular safety checks shall be carried out by the College Buildings Team.
- 4. The premises shall maintain an Accident Log and Public Liability Insurance.
- 5. There shall be dedicated events team overseeing all events that take place on the premises and their staff knowledgeable of the building and fire evacuation procedures.
- 6. The RCOG shall liaise with the Fire Authority on all aspects of the fire safety regulations.
- 7. Fire exits and evacuation procedures will be made clear to the client prior to the event taking place.
- 8. Capacities for licensed areas for each floor are as follows:
 - Ground Floor
 - First Floor
 - Second Floor
 - Third Floor

C) The Prevention of Public Nuisance

- The Dispersal Policy (see attached) shall be adopted and applied to at all times Notices will be displayed at all exits used by visitors requesting guests to leave the building in a quiet manner.
- 2. No noise shall emanate from the premises nor vibration be transmitted through the structure of the premises which gives rise to a nuisance.
- 3. Smoking or vaping is not permitted on the premises.
- 4. Management will be available during operational hours.
- 5. Light from nearby premises shall not cause a nuisance to nearby premises.

D) The Protection of Children From Harm

- 1. Children under the age of 18 are not permitted on the premises unless accompanied by an adult.
- 2. Pre-booked events which may have children under the age of 18 in attendance are to be authorised by the RCOG before the event is confirmed.
- 3. All areas of the building where children will be present will be safety checked for any potential risks and will be made safe or supplied as part of the event.

RCOG DISPERSAL POLICY

The purpose of this Dispersal Policy is to ensure, so far as it is possible, that minimum disturbance or nuisance is caused to our neighbours and to ensure that the operation of the premises makes the minimum impact upon the neighbourhood in relation to potential nuisance and anti-social behaviour. This will be achieved by exercising pro-active measures towards and at the end of the evening.

By ensuring that this Dispersal Policy document is brought to the attention of Management and Staff we will seek to encourage the efficient, controlled and safe dispersal of our patrons during our closing period.

- 1. At the end of the evening management and staff will assist with the orderly and gradual dispersal of patrons.
- 2. Staff Members will advise patrons to leave the premises quickly and quietly out of respect for our neighbours.
- 3. Notices will be displayed requesting our guests to leave quietly and in an orderly manner out of consideration to neighbours and their attention will be drawn to these notices by members of staff.
- 4. We will ensure the removal of all bottles and drinking receptacles from any patron before exiting the premises
- 5. We will actively discourage our customers from assembling outside the premises at the end of the evening.

RCOG SMOKING POLICY

- 1. Any outside area used by customers wishing to smoke shall be covered by the CCTV system which will be installed at the premises.
- 2. The outside area shall be monitored by staff or door staff when in use.
- 3. The area will be cleaned regularly.
- 4. Suitable receptacles shall be provided for smokers to dispose of cigarette butts.
- 5. Signs will be displayed in the area requesting customers keep noise to a minimum.
- 6. Patrons who disregard signage and verbal instructions regarding noise will be asked to move inside and/or leave the premises.
- 7. Open containers of alcohol shall not be permitted to be taken beyond the boundary of the outside area.



RCOG NEW HEADQUARTERS

Acoustic Design Reports

Burk Hunter Adams 21 May 2018





RCOG NEW HEADQUARTERS

Acoustic Design Reports									
Burk Hunter Adams									
Revision	Descriptio	n		Author			Checked by	Issued by	Issue Date
00 01.5	First Issu Updates drawing	ue s (1.5 addition of GF mark)	ed	Curtis Andre	Thor w Ric	npson kard	Ze Nunes	Ze Nunes AR	19/04/2018 24/05/2018
MACH Acoust 3 rd Floor 4 Yo Upper York S Bristol BS2 8QF Eagle House 163 City Road London EC1V 1NR	tics Ltd rk Court treet	t: 0117 944 1388 e: info@machacoustics.com w: www.machacoustics.com	Consult	tants	AR CB CJ JC LT MR OP PS PJ RP SH SD YW ZN ZV TT ZG	Andrew R Claire Bye Chris Jone Josh Child Leonard T Max Reyn Oscar Pop Patrick Sh Phil Jordau Rory Peliz Stefan Ha Steffan Da Hsuan-Yai Ze Nunes Zoe Verno Tracy Toal Zheng Ge	ickard s s erry olds oe uttleworth n a nnan avies ng Wang on	andrew@ma claire@ma chris@ma josh@ma leonard@ma max@ma oscar@ma patrick@ma stefan.d@ma steffan.d@ma yang@ma ze@ma ze@ma zoe@ma chacy@ma	chacoustics.com chacoustics.com chacoustics.com chacoustics.com chacoustics.com chacoustics.com chacoustics.com chacoustics.com chacoustics.com chacoustics.com chacoustics.com chacoustics.com chacoustics.com chacoustics.com chacoustics.com chacoustics.com chacoustics.com chacoustics.com

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ATRIX



1.0 INTRODUCTION

The following report outlines the design requirements for RCOG New Head Quarters necessary to obtain the available BREEAM 2014 Refurbishment and Fit-out credits. To comply with these credits acoustic targets relating to background noise in cellular spaces, sound insulation and reverberation times must be complied with, see Section 2. This document therefore addresses each of these issues in turn. Note that MACH would be advising very similar/equal standards to those given in BREEAM, therefore these standards are not seen to add considerable cost or restriction to the project, maybe just a little more inflexibility.

There are no mandatory targets associated with this development, other than BREEAM. As such the advice throughout this report is for guidance purposes only. MACH Acoustics has carried out assessments in accordance with the standards, guidance and good practice as presented below:

- BS 8233: 2014 'Guidance on sound insulation and noise reduction for buildings'.
- BREEAM Refurbishment and Fit-out 2014
- BCO Guidance
- Building Bulletin 93 (BB93)

In addition to the typical internal acoustic design of the building, there is a BREEAM Pol05 noise pollution credit available. Considering that there will be a planning requirement to ensure that plant noise levels are mitigated sufficiently, it is recommended that the BREEAM Pol 05 credit is also targeted, since there would be no additional cost to the projects to achieve this.





PERFORMANCE TARGETS 2.0

BREEAM 2014 Refurbishment and Fit-out 2.1

BREEAM Hea 05 2.1.1

BREEAM 2014 Refurbishment and fit-out states that up to three credits are available under Hea 05. Since this is a partial fit-out, to achieve these three credits a multi-part assessment will be used following Part 3 and Part 4, which cover the three acoustic principles of;

- Sound Insulation (First credit)
- Indoor Noise Level (Second Credit)
- Reverberation Times (Third Credit)

The credit criteria for Hea05 are presented in Table 2.2 and the associated compliance notes in Table 2.1. Essentially BREEAM requires that the guidance given within BS8233:2014 is followed, further description of BS8233:2014 is presented in Section 2.2

Ref	Terms	Description
СNЗ	Part 3:Local services	Two credits are available for indoor ambient noise and sound insulation, as relevant to the building type and function: Where an SQA confirms that it is not possible to meet the indoor ambient noise and sound insulation criteria in accordance with the relevant tables in full due to the scope of works, in order to demonstrate compliance; measurement and assessment by an SQA are required to demonstrate that the local services either: • do not change the indoor ambient noise levels where noise break-in through the building envelope is dominant and maintain sound insulation between noise-sensitive spaces; or • reduce the indoor ambient noise levels and maintain sound insulation between noise-sensitive spaces.
CN4	Part 4: Interior design	Two credits are available for the sound insulation and reverberation control criteria as relevant to building type and function, in accordance with the relevant tables.
CN5	Multi-part assessment	For any combination of parts, the available credits for each part are assessed. In the instance where the same criteria are applicable to each assessment part, the most onerous requirement must be adopted and a single credit awarded for that element of acoustic performance.

Table 2.1: BREEAM Hea05 – Compliance Notes

Office buildings (th	ree credits)
First credit - Sound	insulation
Criteria	The sound insulation between acoustically sense with the performance criteria given in Section 7
Testing requirement	A programme of pre-completion acoustic test accordance with the acoustic testing and meas information section of this BREEAM issue.
Notes	If testing is to be carried out where the office is 8233:2014 should be referred to when deter to be furnished at the time testing is carried ou the relevant performance criteria.
Second credit - Inte	ernal indoor ambient noise levels
Criteria	Achieve indoor ambient noise levels that comp 8233:2014.
Testing requirement	A programme of acoustic measurements is ca with the acoustic testing and measurement pro section of this BREEAM issue.
Third credit - Rever	beration
Criteria	Acoustic environment (control of reverberation index): Achieve the requirements relating to sound ab applicable, set out in Section 7 of BS 8233:201
Testing Requirement	A programme of acoustic measurements is ca with the acoustic testing and measurement pro section of this BREEAM issue.

Table 2.2: BREEAM 2014 - Hea05 Credit Criteria



ting is carried out by a compliant test body in asurement procedures outlined in the Additional

is not yet furnished, then section 7.5 of BS rmining the performance criteria. Where the office is ut, then refer to section 7.7.6 of BS 8233:2014 for

ply with the design ranges given in Section 7 of BS

arried out by a compliant test body in accordance rocedures outlines in the Additional information

on, sound absorption and speech transmission

bsorption and reverberation times, where 14.

arried out by a compliant test body in accordance rocedures outlined in the Additional information



2.1.2 BREEAM Pol 05

This BREEAM credit is associated with noise pollution emitted from the building, typically from mechanical services noise. The credit criteria (below) is less onerous than the Local Authorities planning requirement. It is therefore considered that this credit is targeted.

Credit Criteria

1. Where there are, or will be, no noise-sensitive areas or buildings within 800m radius of the assessed site.

OR

- 2. Alternatively, where the building does have noise-sensitive areas or buildings within 800m radius of the site, one credit can be awarded as follows:
 - a. Where a noise impact assessment in compliance with BS 74451 has been carried out and the following noise levels measured/determined:
 - i. Existing background noise levels at the nearest or most exposed noise-sensitive development to the proposed development or at a location where background conditions can be argued to be similar.
 - ii. The rating noise level resulting from the new noise source (see CN7).
- 3. The noise impact assessment must be carried out by a suitably qualified acoustic consultant holding a recognised acoustic qualification and membership of an appropriate professional body (see Relevant definitions in the Additional information section).
- 4. The noise level from the proposed site/building, as measured in the locality of the nearest or most exposed noise-sensitive development, is a difference no greater than +5dB during the day (07:00 to 23:00) and +3dB at night (23:00 to 07:00) compared to the background noise level.
- 5. Where the noise source(s) from the proposed site/building is greater than the levels described in criterion 4, measures have been installed to attenuate the noise at its source to a level where it will comply with criterion 4.

2.2 BS8233: 2014

2.2.1 Indoor Ambient Noise Levels

Tables 2 and 6 of BS8233:2014 give guidance on indoor ambient noise levels for a range of spaces. The table presented in Section 3.0 summarises the relevant design ranges applicable to this development.

2.2.2 Sound Insulation

BS8233:2014 gives guidance relating to on-site sound insulation in the form of an example comprehensive matrix (see Appendix D). Once rooms within the development are assigned privacy requirements, expected activity noise levels, and noise sensitivity, the matrix can be used to allocate D_{nT,w} targets between adjacent spaces.

This matrix is open to interpretation and so there is no fixed performance requirements, where the proposed performance requirement is to be determined by the end user and project acoustician. The BS8233:2014 Privacy, Sensitivity and Activity Noise descriptions presented in appendix B can be confusing, where the client may not be certain with the sound insulation they can expect. Mach have therefore presented another method which we will use in order for the client to direct us and the team to the level of sound insulation they require.

BS8233:2014 specifically states that the <u>minimum</u> sound insulation between two offices needs to be approximately 38 dB D_w. Where privacy is particularly important it is recommended the minimum sound insulation be no less than 48 dB D_w. Though it is possible that voices will be heard, conversation is not usually understood. See Section 4 for more information.

2.2.3 Reverberation Control

Room Acoustics is beyond the scope of BS8233:2014, however, it recommends that low ceilings and absorbent ceilings can assist in reducing sound transmission between workstations. Where ceilings are higher than 3 m, it is more difficult to provide acceptable acoustic conditions in open-plan offices with absorption coverage lower than Class A. Where exposed soffits are used additional absorption might be required. Carpet having good sound-absorbent properties is a desirable floor finish.



3.0 BACKGROUND NOISE

Tables 2 and 6 of BS8233:2014 give guidance on indoor ambient noise levels for a range of spaces. The table below summarises the relevant design ranges applicable to this development, where T should be appropriate for the activity involved.

Room Type	Indoor Ambient Noise Level Design Range, L _{Aeq,T} dB
Executive office	35 - 40
Staff/meeting room, training room	35 – 45
Office (open plan)	45 - 50
Reception Room	35 - 40
Corridor, circulation space	45 – 55

Table 3.1: Recommended Indoor ambient noise levels as per BS8233:2014

3.1 Design Requirements

The façade of this development is not undergoing any changes and therefore noise breaking in through the façade is seen as a constant. However, noise around this development is relatively low, thus internal noise level are assumed to be below the above levels. As such the internal noise levels will be dominated by services noise. The table below therefore provides the maximum NR levels for services noise which each of the spaces in this development such to comply with BS8233 and BREEAM. It is considered that the M&E Engineer is responsible of ensuring their design does not exceed these values. These values have been assigned to each room within Table 5.1.

Room Type	Building Services Noise Limit
Open plan offices	NR40
Cellular Offices	NR30
Conference Room	NR30
Meeting Room	NR30
Entrance Lobbies	NR40
Circulation	NR40
Toilets	NR45
Loading Bays	NR55
Underground Car Parks	NR55

Table 3.2: BCO Building Services Noise Targets





SOUND INSULATION OF PARTITION 4.0

Sound insulation and privacy 4.1

Sound Insulation

Sound insulation describes the reduction in sound across a partition. The sound insulation across a good conventional, lightweight, office to office construction is typically in the order of 38 dB D_w. This means that if the sound level in the source room is around 65 dB, (a typical level for speech) the sound level in the adjacent room, the receiver room, will be approximately 25 dB (barely audible). If sound levels are increased in the source room to 75 dB (raised voice), sound levels within the adjacent room will also increase to around 30 dB (audible). Sound insulation therefore describes the level of sound lost across a partition and not the level of sound within an adjacent room.

Privacy

Privacy describes the perceived sound reduction across a wall. Privacy is a function of both sound insulation and background noise. As mentioned previously, background noise is made up of services noise and environmental noise sources breaking in through the facade or open windows, vents etc.

If background noise levels in the room are in the region of 30 dB, with the speech passing through the wall being 25 dB, there will be less than a 10 dB difference between the background noise and speech. This means that the speech will be detectable. However if the background noise is increased to 35 dB, then the speech will no longer be detectable, thus privacy levels are increased.

Subjective Description of Sound Insulation

The table to the right provides an illustrative representation of privacy. This table specifies two D_w levels for a partition, Column 1. One for background noise levels in the receiver room of 35 dBA¹, and the second for background noise levels of 40 dBA².

Summary

The targets currently suggested in the following sections are aimed at ensuring appropriate levels of privacy/separation are achieved between rooms. Using a suggested classification with set privacy, tolerance and sensitivity levels have produced the specification. These are presented in Appendix A and B, it is advised these are reviewed by the design team and client.



1 = High ambient noise level of 40 dBA

2 = Low ambient noise level of 35dBA

Table 3.1. Subjective Description of Sound Insulation

Description
Most sentences clearly understood.
Speech can be heard with some effort. Individual words and occasional phrases.
Loud speech can be heard with some effort. Music easily heard.
Loud speech essentially inaudible. Music heard faintly; bass note disturbing.
Loud music heared faintly, which could be a problem if the adjoining space is highly sensitive to sound intrusion, such as recording studio, concert hall, etc.
Most noises effectively blocked.



4.2 Acoustic Separation Across Existing Partitions

Partitions are required to achieve an airborne sound insulation level as quoted in terms of the weighted, DnTw between two rooms, according to BS8233:2014. However, DnTw is very similar to Dw and will be assumed to be comparable for this report.

4.2.1 President's Office to Meeting Room (Also T6 Meeting to T4 Meeting)

Existing Construction

This wall was tested on site and **achieved 23dB Dw**. This is a poor performance and considered to not be suitable for most cellular office uses. As seen on the table to the right it is considered that conversations will be heard clearly between these spaces.

Remedial Treatment

Improvements could be made to this wall, such as;

- Install a double banked, 50mm foil faced fire barrier, such as the Rockwool Fire Barrier Foil Faced from the head of the wall to the soffit along the whole perimeter of the room. Approximately 40mm gap between each barrier
- Install 50mm Rockwool Fire Barrier Slab at partition line under raise floor.
- Installed silicon seals around the glass door edge.

The above treatment is expected to improve the acoustic performance to approximately **35dB Dw**., therefore it is expected that the resulting performance will be somewhere between the first to rows shown in the table to the right.

Risks with this prediction are that the wall construction is unknown and will limit the possible performance, the single glazed section will limit what is possible. Ventilation grilles straddle over the top of walls and need to be removed / blocked.

New Construction

If any level of privacy is required it is advise that an acoustic performance of at least 45 to 50dB Dw is achieved. If confidentiality is required an increase on the below description is required;

- New wall achieving 55dB Rw, built up to underside of slab. (50dB Rw for T6 to T4)
- Ideally built from structural floor, alternative may be two 50mm fire cavity barriers.
- Internal lining of façade to be broken and partition wall built into cavity.
- 45dB Rw corridor wall / glazing. if using a glazing system, use separate frame and system either side of partition.
- Door rated to at least 30dB Rw, ideally 35dB Rw.



1 = Low ambient noise level of 35dBA

2 = High ambient noise level of 40 dBA



Figure 4.1: Images of Presidents office, ventilation grille straddling

Subjective Description

Most sentences clearly understood.

Speech can be heard with some effort. Individual words and occasional phrases.

Loud speech can be heard with some effort. Music easily heard.



4.2.2 RCOG Meeting Rooms

Meeting rooms MT44 to 48 on the first floor are intended to be left untouched. They are the better performing meeting rooms, key benefits are;

- Glass front is split by partition wall.
- Better doors and frames
- Ceiling plasterboard was butted up to either side of partition, not continuous.

Speech could be heard but words were not clear and could not be understood. The acoustic separation between these meeting rooms is in the region of 40+dB Dw. These are considered to be acceptable for standard meeting rooms, where any improvements to be made will be very difficult to implement, since the wall would need to go to soffit and floor barriers included.



Figure 4.2: First Floor RCOG Meeting Rooms



Table 4.1: Description of sound insulation values

4.2.3 T21 Meeting Room

This meeting room on the third floor is understood to have a solid partition in addition to a folding wall partition, which separates the space with T20 Breakout. These partitions are understood to not go full height and will be more like a screen and open at the top.

If this is to be taken forward, the acoustic separation between to two spaces will be in the region of 20 to25 dB Dw, this is based upon the ceiling having a high absorbency, such as Class A and not plasterboard. This is likely to not be acceptable if the 300 seat Meeting Hall decanted into the break out space, while T21 was used independently. It is therefore considered that a managed approach is used for this room, where it is possible that the proposed partitions will be acceptable when the Meeting Hall and breakout is not being used, since this area would be un-occupied and noise intrusion would be minimal.

If ceilings are introduced such that the space can be a fully cellular space, the solid partition, would be advised to have a rating of 45dB Rw, Door 35dBA, folding wall 55dB Rw. Note; the folding wall will provide an onsite performance of approximately 40 to 45dB Dw. Moving the single leaf door may also be worth considering.



Subjective Description

- Most sentences clearly understood.
- Speech can be heard with some effort. Individual words and occasional phrases.
- Loud speech can be heard with some effort. Music easily heard.





4.2.4 Plant Room

The Plant room on the first floor is understood to include and AHU, other equipment may also be included.

At this stage it is advise that the wall separating the plant room achieved 60dB Rw, and that a Lobbied door is included. <u>Based upon this design it is considered that the plant room should not exceed a noise rating level of NR55. If the M&E Engineer cannot achieve this, Mach should be informed where further advise can be provided.</u>

Flanking via the roof and floor requires further analysis, where at this stage it is recommended that a plasterboard ceiling is included within the plant room to mitigate sound flanking over the ceiling. This should consist of two layers of plasterboard and 100mm mineral wool laid on top in the ceiling void.

Flanking via the floor will be difficult to control and <u>will require further analysis</u>, options may be to increase the mass by installing a thick screed board or similar and investigation to see if mineral wool insulation is included within the floor joists.

Direct sound transmission through the floor to the office below also requires further consideration.

Based upon onsite sound tests the floor achieves 45 dB Dntw. Based upon the plant room noise limit suggested of NR55. The predicted noise level within the offices below is 40dBA. this is right at the limit of recommended internal noise levels for cellular offices / meeting rooms. And leaves no head room for noise from other building services. We would typically recommend that noise intrusion from plant rooms is 10dB below the recommended internal ambient noise level criteria. This may require a screed board as described above in addition to further work on the ceilings below. <u>Further design development is required.</u>



Figure 4.4: Plant Room Wall partitions







4.3 Onsite Sound Insulation Requirements

Table 4.1 provides a summary of the sound insulation requirements for office and ancillary spaces, that is currently being advised. The sections preceding this may provide the client and design team further information such that these may change. Floor plan mark-ups are also provided within the appendix.

Such to meet the required on-site sound insulation levels, the lab rated sound insulation levels R_w of partitions are also given in Table 4.1. The R_w levels are not seen to be mandatory, but if built correctly will meet the required on site sound insulation, $D_{nT(Tmf,max),w}$, levels.

The minimum sound reduction index for all new partitions that are not marked up on the acoustic requirement drawings in Appendix A are 45 dB R_w.

4.4 Corridor Walls & Doors

Walls separating office space from circulation space and corridors should have a minimum airborne sound insulation performance of 40dB R_w and the door achieving a performance of 30dB Rw.

However, where doors lead to break-out spaces, these will be higher noise environments and therefore a 5dB increase is recommended to 45dB Rw for walls and 35dB Rw for doors.

4.4.1 Minimising wall types

It has been requested to minimise the number of wall types, the difference in construction of a 40dB wall to a 45dB wall is typically the addition of acoustic insulation in the cavity. We have therefore typically used 45dB Rw for these walls.

Room 1	Room 2	Privacy Requireme nt	Noise Sensitivity	Minimum On- site Requirement Dnt((tmf,max)w (dB)	Calculated SRI for partition Rw (dB)	Simplified SRI for partition R _w (dB)
		GR	OUND FLOOR			
G4 Café	G6 Meeting Room	None	Not Sensitive	42	53	60 Increased due to cupboard impact
G6 Meeting Room	G7 Members Lounge	Moderate	Medium Sensitivity	37	48	50
G7 Members Lounge	G8 Multi-Faith Room	Moderate	Medium Sensitivity	42	49	50
G9 Kitchen/Delivery Route	G8 Multi-Faith Room	Moderate	Sensitive	57	64	65
G9 Kitchen/Delivery Route	G7 Members Lounge	Moderate	Sensitive	52	55	55
		F	IRST FLOOR			
F6 Meeting Room	F7 Meeting Room	Moderate	Medium Sensitivity	42	53	55
F7 Meeting Room	F8 Meeting Room	Moderate	Medium Sensitivity	42	48	50
F8 Meeting Room	F9 Meeting Room	Moderate	Medium Sensitivity	42	52	55
1	1	SE	COND FLOOR			
S6 Meeting Room	S7 Meeting Room	Moderate	Medium Sensitivity	42	53	55
S7 Meeting Room	S8 Meeting Room	Moderate	Medium Sensitivity	42	48	50
S8 Meeting Room	S9 Meeting Room	Moderate	Medium Sensitivity	42	53	55
		Т	HIRD FLOOR			
T4 Office	T6 Office	Moderate	Medium Sensitive	42	49	50
T5 Pres Office	T3 Meeting	Moderate	Sensitive	47	55	55
T40 300 Person Meeting Hall	T41 Plant	Moderate	Sensitive	50	60	60
T40 300 Person Meeting Hall	T43 AV Store	Moderate	Sensitive	37	46	50
1			BASEMENT			
B21 Simulation Room	B18 Seminar Room	Moderate	Medium Sensitivitv	37	44	45

Table 4.2: Calculated $R_{\rm w}$ Requirements for Separating Partitions



4.5 Wall Constructions

4.5.1 Lightweight Metal Stud Wall Constructions

Table 4.2 provides a range of example constructions that are capable of achieving different R_w requirements. Please note that the constructions provided in Table 4.2 are based on data published by British Gypsum, hence a BG reference is provided for these partitions. The list is not exhaustive and other manufacturers can provide a similar systems. Other construction types are also capable of achieving the required performance standards.

id	R _w Rating	Reference	Illustration of Construction	Description	Thickness (mm)
1	40dB Rw	A206A164		 12.5mm Wallboard 70mm Metal Studs at 600mm Centres 50mm Cavity Insulation 12.5mm Wallboard 	97
2	45dB Rw	A206305S		 12.5mm SoundBloc 92mm Gypframe C Studs 25mm Cavity Insulation 12.5mm SoundBloc 	124
3	50dB R _w	A206263		 15mm SoundBloc 92mm Gypframe C Studs 50mm Cavity Insulation 15mm SoundBloc 	124
4	55dB Rw	A206A289S		 2 x 12.5mm SoundBloc 92mm Gypframe AcouStuds 25mm Cavity Insulation 2 x 12.5mm SoundBloc 	144
5	60dB Rw	A206A292S		 2 x 12.5mm SoundBloc 92mm Gypframe AcouStuds 100mm Cavity Insulation 2 x 12.5mm SoundBloc 	144
6	64dB Rw	A2160115		 2 x 15mm SoundBloc 92mm Gypframe AcouStuds 75mm Cavity Insulation 2 x 15mm SoundBloc 	250

Table 4.3: Metal Stud Wall Constructions and Corresponding Rw Ratings

Please note marked up drawing of the above information is provided in appendix A at the end of this document.

If the number of partition types need to be reduced or alternative partition are preferred MACH are more than happy to review these options.

4.6 Glazing

Table 4.4 below provides examples of glazing configurations that can achieve varying levels of sound insulation.

R _w Rating	Description
35 dB R _w	4 (20) 6 Standard
40 dB R _w	6 (27) 10 Standard
45dB Rw	10 (16) 8.4A Acoustic
50dB R _w	8.8A (24) 12.8A Acoustic

Table 4.4: Glazing Configurations and Corresponding $R_{\rm w}$ Ratings

Please note that the performances stated are taken from data provided by Saint Gobain. The performance of the glazing products to the stated rating is therefore the responsibility of the manufacturer.

4.7 Movable Partitions

The movable walls should achieve at least 55 dB R_w. Although this performance will not achieve high sound insulation criteria, i.e. that between two classrooms, it will still provide a good level of noise reduction between the two spaces.

It is expected that the moveable walls will achieve in the region of 40 to 45 dB Dw. This is due to their inherent flanking sound limitations. Any higher performance required will require a standard partition construction.

4.8 Toilet Partitions

It is recommended that any partition separating a toilet from a noise sensitive room should have an airborne sound insulation of at least 45 dB R_w .



4.9 Sound Insulation - Floors

At this stage, the acoustics performance of the floors and ceilings are not known and are understood not to be undergoing considerable change. However, based upon the required privacy levels for the office spaces above, the table below provides the required acoustic performance of the separation floor between offices spaces.

ID	Room 1	Room 2	Minimum On-site Requirement Dnt((Tmf,max)w (dB)	Calculated SRI for partition R _w (dB)
1	B21 Simulation Room	G7 Members Lounge	37	46
2	B18 Seminar Room	G6 Meeting Room	37	46
3	B17 Delivery Holding	G4 Café	37	44
4	B13 Toilet	G4 Café	37	46
5	F9 Meeting Room	G18 Male WCs	37	46
6	F9 Meeting Room	G9 Kitchen/Delivery Route	52	57
6	F9 Meeting Room	G12 Reading Room/Heritage Display	47	54
7	F8 Meeting Room	G9 Kitchen/Delivery Route	52	58
8	F8 Meeting Room	G8 Multi-Faith Room	47	56
9	F8 Meeting Room	G7 Members Lounge	42	44
10	F7 Meeting Room	G7 Members Lounge	42	49
11	F6 Meeting Room	G6 Meeting Room	37	46
12	F4 Meeting Room	G4 Café	42	48
13	F5 Surgical Skills Storage	G4 Café	37	46
14	S9 Meeting Room	F9 Meeting Room	42	51
15	S8 Meeting Room	F8 Meeting Room	42	51
16	S7 Meeting Room	F7 Meeting Room	42	52
17	S6 Meeting Room	F6 Meeting Room	37	46
18	S5 Surgical Skills Storage	F5 Surgical Skills Storage	-	-
19	S4 Meeting Room	F4 Meeting Room	42	51
20	T1 RCOG Offices	S9 Meeting Room	42	43
21	T1 RCOG Offices	S8 Meeting Room	42	46
22	T1 RCOG Offices	S7 Meeting Room	42	47
23	T1 RCOG Offices	S6 Meeting Room	37	46
24	T1 RCOG Offices	S4 Meeting Room	42	46

Table 4.4: Calculated R_w Requirements for Separating Floors



5.0 **REVERBERATION TIME**

5.1 **Reverberation Targets**

The most onerous performance targets associated with reverberation control within the development are those as given within BS8233:2014. However, BS8233:2014 does not provide reverberation time targets for any room classification. Instead they provide a design ethos as described in Section 2.2.3.

Table 5.1 to the right indicates each room and the currently agreed ceiling finish, those in green are considered to have acceptable acoustic treatment and would meet the BREEAM requirement.

However, those rooms in orange text are intending to have an exposed concrete soffit. This is not immediately conducive to good acoustics and so a more detailed calculated assessment will be carried out. see Section 5.3.

As only open plan offices have reverberation guidance under BS 8233: 3014 and BCO 2014, BB93 has been used as an additional guidance to control reverberation time in other rooms.

5.2 **Corridors and Circulation Spaces**

As above, for circulation spaces, a level of absorption is recommended to mitigate any noise build-up, and reduce noise break in, to adjacent spaces. Mach would have recommended as a minimum, an area equal to the floor area should be covered with a Class C absorber or better. Should a higher performing absorber be preferred, then MACH Acoustics should be consulted in regard to the required areas.

No.	Room Name	Ceiling	Building Services Noise Limit
TBC	Seminar Room	Class A Ceiling Tile	NR35
B21	Simulation Room	Class A Ceiling Tile	NR35
G11	Heritage Display	Class A Ceiling Tile	NR38
G12	Reading Room/Heritage Display	Class A Ceiling Tile	NR38
G2	Courtyard Atrium	See Report	NR40
G4	Café	Class A Ceiling Tile	NR38
G6	Meeting Room	Class A Ceiling Tile	NR35
G7	Members Lounge	Class A Ceiling Tile	NR35
G8	Multi-Faith Room	Class A Ceiling Tile	NR35
F44	MTG ROOM	Class A Ceiling Tile	NR35
F45	MTG ROOM	Class A Ceiling Tile	NR35
F46	MTG ROOM	Class A Ceiling Tile	NR35
F47	MTG ROOM	Class A Ceiling Tile	NR35
F48	MTG ROOM	Class A Ceiling Tile	NR35
F40	RCOG Offices	Class A Ceiling Tile	NR40
F20	RCOG Offices	Plasterboard	NR40
F4	Meeting Room	Exposed Conc.	NR35
F6	Meeting Room	Exposed Conc.	NR35
F7	Meeting Room	Exposed Conc.	NR35
F8	Meeting Room	Exposed Conc.	NR35
F9	Meeting Room	Exposed Conc.	NR35
S1	Breakout	Class A Ceiling Tile	NR38
S4	Meeting Room	Exposed Conc.	NR35
S6	Meeting Room	Exposed Conc.	NR35
S7	Meeting Room	Exposed Conc.	NR35
S8	Meeting Room	Exposed Conc.	NR35
S9	Meeting Room	Exposed Conc.	NR35
S20	RCOG Office	Plasterboard	NR35
T1	RCOG Offices	Class A Ceiling Tile	NR40
Т3	Meeting Room	Class A Ceiling Tile	NR35
Т6	Office	Class A Ceiling Tile	NR35
T4	MTG Room	Class A Ceiling Tile	NK35
T40	300 Person Meeting Hall	Autex Cube ceiling Wool surge curtain rear wall See Meeting Hall Report	NR30
T5	Pres Office	Class A Ceiling Tile	NR30
T21	Meeting Room	Class A Ceiling Tile	NR35
T20	Breakout	Class A Ceiling Tile	NR38

Table 5.1: Reverberation Treatment and Plant Noise Rating Requirements



5.3 **Conference Rooms with Exposed Soffit**

The rooms presented in this section are conference / meeting rooms which have an architectural requirement to expose the coffered concrete soffit.

There are two possible methods to limit the impact of acoustic treatment;

- Install acoustic foam cut to the profile of the soffit with an adhesive backing, 50mm thickness should achieve Class A. – This method is not a typical approach and require further design input.
- Include acoustic absorption on the folding wall. This could include;
 - Perforated Board Class D
 - Acoustic foam with material finish Class C
 - Such products are available for Accordial Wall systems, possibly others.

The table to the right looks at each room and provides the results of calculations which have accounted for;

- Lightly upholstered seats
- Carpet floor finish
- Acoustic treatment on the folding walls
 - o No treatment
 - o Class D
 - o Class C
- Additional Class A Treatment (acoustic foam) in order to achieve target RT (Last Column)

Note; The target RT of 0.8s is ideal, however, 1.0 seconds could be an acceptable compromise. This suggested that treatment on the folding wall may suffice, with no further treatment on the soffit.



Perforated Folding Wall – Class D



Foam with material finish – Class A

Room	Folding Partition		Lightly Upholstered Seating	Reverberation Time (s)		Additional Treatment to achieve 0.8s(m2)
	Absorption	Area (m2)	Area (m2)	Targeted	Calculated	Class A
F4 9 C4	Class C		47	0.8	0.8	0
F4 & 54	Class D	27			1.0	14
Lecture Room	No Absorption				1.1	24
	Class C	15	5	0.8	0.8	0
FD & SD Meeting Room	Class D				1.0	6
Weeting Room	No Absorption				1.4	10
	Class C	s C 15 S D 15 Absorption	5	0.8	1.0	5
F/&S/ Meeting Room	Class D				1.2	10
Weeting Room	No Absorption				1.5	15
50 8 60	Class C			0.8	0.7	0
F8 & S8	Class D	27	22		0.9	4
Lecture Room	No Absorption				1.1	12
50 8 60	Class C	28	34	0.8	0.8	0
F9 & 59	Class D				1.0	11
	No Absorption				1.1	21

Table 5.2: Lecture Room RT summary





Foam to metal deck – Class A

RCOG New Headquarters Acoustic Design Reports

Slotted folding wall panel – Class D



APPENDIX A - SOUND INSULATION MARK UPS

Basement





Ground Floor





First Floor





Second Floor



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Third Floor







APPENDIX B - BRITISH COUNCIL FOR OFFICES 2014

The information below is for reference only, since the guidance in BS8233 has been used throughout this document.

The guidance provided by the British Council for Offices 2014 (BCO), is such to control noise and vibration levels to the benefit of all, as noise levels within the workplace affect people's ability to concentrate and productivity. BCO focuses on the following main areas; internal ambient noise levels; natural ventilation; rain noise; sound insulation; reverberation times; and plant noise limits. More in-depth information on the areas pertaining to this development can be found in the following sections.

5.3.1 Sound Insulation

Sound level difference vertically between individual office floors should be <u>at least D_{nTw} 45 dB at shell and core</u> <u>stage</u>, or at least D_{nTw} 48 dB if fitted to Cat A standards when tested, in accordance with BS EN IS 140-4: 1998, and rated, in accordance with BS EN 717-1:1997. Demise walls, such as those to retail or other office borders, <u>should achieve this difference as well</u>. Note, the degree of privacy between spaces will be determined by the levels of masking noise and the internal sound insulation between partitioned areas.

5.3.2 Reverberation Control

To control unwanted primary noise reflections and the reverberant build-up of sound, BCO 2014 requires all open plan offices to include a ceiling that provides Class A Absorption. If the space is to have no ceiling, then additional absorptive treatment is required to achieve 'an equivalent standard of acoustic separation/privacy between work stations.

BCO also states that carpet floor finishes are desirable to aid reverberation and reduce impact noise from footfall. Hard floor finishes should be avoided in office areas.

APPENDIX C - ACOUSTIC TERMINOLOGY

Absorption Classes	The sound absorption of a material is rated from Clas highest levels of sound absorption.
Ambient Noise	Noise levels measured in the absence of noise requir
Levels	situation prior to the addition of a new noise source.
dB	Decibel. The logarithmic unit of sound level.
dBA	A-weighted decibel. The A-weighting approximates the
D _{nT,w}	Weighted standardized level difference. A single numrooms. $D_{nT,w}$ is typically used to measure the on-site s as a wall, floor or ceiling. Measured in accordance wit EN ISO 717-1.
D _{n,e,w}	The weighted element-normalized level difference. As a sound passing through an individual element. $D_{n,e,w}$ by ventilators. Measured in accordance with BS EN IS 717-1.
Flanking	Transmission of sound energy through paths adjacen sound may be transmitted around a wall by travelling adjacent room.
Frequency	Sound can occur over a range of frequencies extending to the very high such as the crash of cymbals. Sound 63Hz to 4kHz, roughly equal to the range of frequence
Impact Sound	Sound produced by an object impacting directly on a scrapping on a floor.
L _{Aeq,t}	The equivalent continuous sound level measured in d level. "t" is the interval time for the measurement whic compliance with BB93.
L _{A90,t}	The noise level exceeded for 90% of the measuremer as the background noise level.
L' _{nT,w}	Weighted, standardized impact sound pressure level. a floor/ceiling when impacted on by a standard 'tappe performance. Measured in accordance with BBS EN IS
NR	Noise Rating. A single number rating which is based of inclusive, generally used to assess noise from mechan
Octave band	Frequencies are often grouped together into octaves frequency which are: 63Hz, 125Hz, 250Hz, 500Hz 1kH
Reverberation	Reverberation time is used for assessing the acoustic
time (T _{mf})	an impulse to decay by 60dB. T_{mf} is the arithmetic ave bands (500Hz, 1k Hz and 2 kHz).
R _w	Weighted sound reduction index. A single number rabuilding element. R _w is measured in a laboratory. R _w sound insulation performance of building elements su accordance with BS EN ISO 10140-2:2010 and rated i
Sound Absorption	When sound hits a surface, some of the sound energy refers to the ability of a material to absorb sound, rate
Sound Insulation	When sound hits a surface, some of the sound energy the ability of a material to prevent the travel of sound
Structure-borne transmission	Transmission of sound energy as vibrations via the st

ss A to Class E, where Class A materials provide the

ing control, frequently measured to determine the

ne response of the human ear.

nber quantity of the sound level difference between two sound insulation performance of a building element such th BS EN ISO 16283-1 and weighted in accordance with BS

single number rating of the sound reduction provided by is typically used to define the sound insulation provided 50 10140-2:2010 and rated in accordance with BS EN ISO

nt to the building element being considered. For example, g up into the ceiling space and then down into the

ng from the very low, such as the rumble of thunder, up is generally described over the frequency range from ies on a piano.

building structure, such as footfall noise or chairs

dBA. This is commonly referred to as the average noise ch is most often 30 minutes when demonstrating

nt period, measured in dBA. This is commonly referred to

A single number rating of the impact sound insulation of er' machine. The lower the $L'_{nT,w}$ the better the acoustic SO 140-7 and rated in accordance with BS EN ISO 717-2. on the sound level in the octave bands 31.5Hz – 8kHz nical services in buildings.

; for analysis. Octave bands are labelled by their centre Hz, 2kHz and 4kHz.

c qualities of a space. It is defined as the time it takes for erage of the reverberation time in the mid frequency

ating of the sound insulation performance of a specific , is commonly used by manufacturers to describe the such as plasterboard and concrete. Measured in in accordance with BS EN ISO 717-1

gy is absorbed by the surface material. Sound absorption ted from 0, complete reflection, to 1, complete absorption. gy travels through the material. 'Sound insulation' refers to

ructure of a building.



APPENDIX D – CLASSIFICATIONS BASED UPON THE BS8233 MATRIX

BS8233: 2014 states that the following matrix should be used to determine the sound insulation requirement of separating partitions once the noise activity, noise sensitivity and privacy requirements are established.

Privacy	Activity noise of source room	Noise sensitivity of receiving rooms			
Requirement		Low sensitivity	Medium sensitivity	Sensitive	
Confidential	Very high	47	52	57 *	
	High	47	47	52	
	Typical	47	47	47	
	Low	42	42	47	
Moderate	Very high	47	52	57 *	
	High	37	42	47	
	Typical	37	37	42	
	Low	No rating	No rating	37	
Not private	Very high	47	52	57 *	
	High	37	42	47	
	Typical	No rating	37	42	
	Low	No rating	No rating	37	

* DnT.w 55dB or greater is difficult to obtain on site and room adjacencies requiring these levels should be avoided wherever practical

Table 6.3 : BS8233:2014 Table 3 on-site sound insulation matrix, (dB $D_{nT,w}$)

Classification	Privacy Requirements	Noise Generation	Noise Sensitivity
Single-person office	Moderate	Typical	Medium Sensitivity
Executive office	Moderate	Typical	Medium Sensitivity
Multi-person office (2-4 people)	Moderate	Typical	Medium Sensitivity
Open-plan office (≥5 people)	None	Typical	Medium Sensitivity
Boardroom	Confidential	High	Medium Sensitivity
Large meeting rooms (>35 m ² floor area)	Moderate	High	Medium Sensitivity
Small meeting rooms (≤35 m² floor area)	Moderate	Typical	Medium Sensitivity
Interview room	Confidential	Typical	Medium Sensitivity
Large training/seminar (>35m ²)	Moderate	High	Medium Sensitivity
Small training/seminar (≤35m²)	Moderate	Typical	Medium Sensitivity
Lecture Theatre	Moderate	High	Sensitive
Library/archiving room	Moderate	Low	Sensitive
Counselling	Confidential	High	Medium Sensitivity
Nurseries	Moderate	Very High	Medium Sensitivity
Multi-faith/chapel	Moderate	High	Sensitive
Waiting (large > 20 people)	None	High	Not Sensitive
Waiting (small \leq 20 people)	None	Typical	Not Sensitive
Atrium	None	High	Not Sensitive
Dining	None	High	Not Sensitive
Toilets (not cubicles)	Moderate	Typical	Not Sensitive
changing room	Moderate	Typical	Not Sensitive
Corridor (no door)	None	Typical	Not Sensitive
Large kitchen	None	Very High	Not Sensitive
Small kitchenette	None	Typical	Not Sensitive
N/A - Storeroom	None	Low	Not Sensitive
N/A - Plant	None	High	Not Sensitive
N/A - Electrical plant	None	Typical	Not Sensitive
Sensitive Multi-person office (2-4 people)	Moderate	Typical	Sensitive
Satellite Equipment Room	None	Low	Not Sensitive

Table 6.4 : Privacy Requirements, Noise Generation and Noise Sensitivity of BS833 Classifications



APPENDIX E – Room ID, Name and Information

Room	HTM Classification	Area (m2)	Height (m)		
	Basement				
B25 Plant	#Plant	18.00	2.92		
B26 Services Room 2	Satellite Equipment Room	17.00	2.92		
B24 Ser	Satellite Equipment Room	14.00	2.92		
B23 AV Store	Storeroom	15.00	2.92		
B3 Uni WC	Toilets (not cubicles)	3.60	2.92		
B4 Uni WC	Toilets (not cubicles)	3.60	2.92		
B5 Luggage Store	Storeroom	18.00	2.92		
B6 Kitchen Store	Storeroom	18.00	2.92		
B7 Print Room	Multi-person office (2-4 people)	101.00	2.92		
B20 RCOG Storage	Storeroom	15.00	2.92		
B22 RCOG Storage	Storeroom	99.00	2.92		
B21 Simulation Room	Small meeting rooms (≤35 m² floor area)	29.00	2.92		
B18 Seminar Room	Small meeting rooms (≤35 m² floor area)	26.00	2.92		
B17 Delivery Holding	Storeroom	34.80	2.92		
B16 Kitchen Waste Store	Storeroom	12.00	2.92		
B14 Porters Room	Open-plan office (≥5 people)	5.40	2.92		
B13 Toilet	Toilets (not cubicles)	2.30	2.92		
B15 Store	Storeroom	1.40	2.92		
B12 Bin Store	Storeroom	18.00	2.92		
B9 Lift Motor Room	Storeroom	5.30	2.92		
B8 Plant	#Plant	30.00	2.92		
Ground Floor					
G1 Main Passageway	Atrium	33.00	2.92		
G3 Lobby	Atrium	19.00	2.92		
G4 Café	Dining	81.00	2.92		
G6 Meeting Room	Multi-person office (2-4 people)	45.00	2.92		
G7 Members Lounge	Multi-person office (2-4 people)	66.00	2.92		
G9 Kitchen/Delivery Route	Large kitchen	21.00	2.92		
G12 Reading Room/Heritage Display	Library/archiving room	47.00	2.92		
G15 Store	Storeroom	4.20	2.92		
G14 Store	Storeroom	7.10	2.92		
G16 Female WCs	Toilets (not cubicles)	12.80	2.92		
G18 Male WCs	Toilets (not cubicles)	7.80	2.92		
G19 Dis WCs	Toilets (not cubicles)	3.80	2.92		
G11 Heritage Display	Open-plan office (≥5 people)	36.50	2.92		

610 BreakoutAtrium56002.92G17 LobbyArium0.0002.92G2 Cuttycri AtriumMulti-fath/chapel0.0002.92G8 Multi-Fath RoomMulti-fath/chapel1.5002.92G15 StoreStoreroom9.0002.92F1 Bobing RoomStoreroom9.0002.92F2 Abbing RoomLarge meeting rooms (>3.50° facor area)9.0002.92F3 Meeting RoomStoreroom2.922.92F5 Surgical Skils StorageStoreroom2.922.92F7 Meeting RoomStorerooms (>3.50° facor area)4.0002.92F8 Meeting RoomLarge meeting rooms (>3.50° facor area)4.0002.92F9 Meeting RoomLarge meeting rooms (>3.50° facor area)6.0002.92F9 Meeting RoomLarge meeting rooms (>3.50° facor area)6.1002.92F9 Meeting RoomLarge meeting rooms (>3.50° facor area)6.1002.92F0 Meeting RoomLarge meeting rooms (>3.50° facor area)6.1002.92F1 Meeting RoomLarge meeting rooms (>3.50° facor area)6.1002.92F1 Meeting RoomLarge meeting rooms (>3.50° facor area)1.0002.92F1 Male WCsTolets (not cubicles)1.0002.92F1 Male WCsTolets (not cubicles)2.1002.92F1 Hande WCsTolets (not cubicles)2.1002.92F1 Act MCStoreroom6.4002.92S Stargical Skills StorageStoreroom (>3.50° facor area)6.4002.92 <t< th=""><th>Room</th><th>HTM Classification</th><th>Area (m2)</th><th>Height (m)</th></t<>	Room	HTM Classification	Area (m2)	Height (m)		
G17 LobbyAtrium5.602.92G2 Coursyard AriumArium0.0002.92G8 Multi-Faith RoomMulti-faith/chapel15.002.92G15 StoreStoreroom13.002.92F3 LobbyStoreroom9.002.92F3 LobbyArium13.102.92F3 LobbyArium13.002.92F5 Surgical Skills StorageStoreroom5.002.92F6 Meeting RoomSmall meeting rooms (>35 m² floor area)40.002.92F7 Meeting RoomLarge meeting rooms (>35 m² floor area)40.002.92F8 Meeting RoomLarge meeting rooms (>35 m² floor area)56.002.92F8 Meeting RoomLarge meeting rooms (>35 m² floor area)81.002.92F0 Meeting RoomPalant1.002.92F1 Male WCsToilets (not cubicles)1.002.92F1 Male WCsToilets (not cubicles)1.012.92F14 Famale WCsToilets (not cubicles)1.022.92F14 Famale WCsToilets (not cubicles)3.002.92S5 Loby AtriumSaleelike Fquipment Room6.402.92S4 Meeting RoomSaleelike Fquipment Room6.402.92S5 Loby AtriumLarge meeting rooms (>35 m² floor area)	G10 Breakout	Atrium	56.00	2.92		
S2 Courgard ArriumAtrium0.0002.92GR Multi-Faith RoomMulti-faith/chopel15.002.92G1 StoreStoreroom3.802.92F2 Robing RoomStoreroom9.002.92F3 LobbyAtrium13.102.92F4 Meeting RoomLarge meeting rooms (>35 m² floor area)110002.92F5 Surgical Skils StorageStoreroom25.002.92F6 Meeting RoomLarge meeting rooms (>35 m² floor area)40.002.92F7 Meeting RoomLarge meeting rooms (>35 m² floor area)41.002.92F8 Meeting RoomLarge meeting rooms (>35 m² floor area)41.002.92F8 Meeting RoomLarge meeting rooms (>35 m² floor area)41.002.92F8 Meeting RoomLarge meeting rooms (>35 m² floor area)41.002.92F1 Meeting RoomHafant1.002.922.92F1 Male WCsTolets (not tubicles)1.002.92F1 Male WCsTolets (not tubicles)3.102.92F1 LobbyAtrium2.302.92F2 SerSatellt Equipment Room (>35 m² floor area)6.402.92F3 ACC WCIarge meeting rooms (>35 m² floor area)1.902.92F3 ACC WCSatellt Equipment Room3.102.92F3 ACC WCSatellt Equipment Room3.102.92F3 ACC WCSatellt Equipment Room3.902.92Satellt Equipment Room1.902.922.92Satellt Equipment Room (>35 m² floor area)8.9	G17 Lobby	Atrium	5.60	2.92		
68 Multi-Faith RoomMulti-faith/chapel15.002.92G15 StoreStoreroom3.802.92F15 EloorF15 Eloor9.002.92F3 LobbyArrum13.102.92F4 Meeting RoomLarge meeting rooms (>35 m² floor area)10.002.92F5 Surgical Skills StorageStoreroom2.002.92F6 Meeting RoomLarge meeting rooms (>35 m² floor area)31.002.92F7 Meeting RoomLarge meeting rooms (>35 m² floor area)81.002.92F8 Meeting RoomLarge meeting rooms (>35 m² floor area)81.002.92F9 Meeting RoomLarge meeting rooms (>35 m² floor area)81.002.92F9 Meeting RoomLarge meeting rooms (>35 m² floor area)81.002.92F1 Meeting RoomHarge meeting rooms (>35 m² floor area)81.002.92F1 Meeting RoomF19ar2.902.92F1 Meeting RoomF19ar2.902.92F11 Male WCsF10arF10ar2.92F11 Male WCsTolets (not cubides)1.002.92F12 LobbyArum2.902.92F13 ACC WCTolets (not cubides)1.012.92F13 LobbyArum1.932.92S1 LobbyArum2.902.92S1 LobbyArum2.902.92S1 LobbyArum2.902.92S1 LobbyArum2.902.92S1 LobbyArum2.902.92S1 LobbyLarge meeting rooms (>3.5 m	G2 Courtyard Atrium	Atrium	0.00	2.92		
StoreomStoreom3.809.80Fist HorFist HorFist RomStoreom9.009.292Fi lobyAtrum13.002.921Fi Meeting RoomLarge meeting rooms (>35 m² floor area)9.002.921Fi Surgical Skills StorageStoreom2.5002.921Fi Meeting RoomStare meeting rooms (>35 m² floor area)9.0002.921Fi Meeting RoomLarge meeting rooms (>35 m² floor area)6.0002.921Fi Meeting RoomLarge meeting rooms (>35 m² floor area)6.0002.921Fi Meeting RoomLarge meeting rooms (>35 m² floor area)6.0002.921Fi Meeting RoomLarge meeting rooms (>35 m² floor area)0.0002.921Fi Meeting RoomHarge meeting rooms (>35 m² floor area)0.0002.921Fi Meeting RoomFlant1.0002.921Fi Meeting RoomFlant1.0002.921Fi Male NGsFlant1.0002.921Fi Male NGsFlant1.0002.921Fi Male NGsFlant1.0002.921Fi Male NGsFlant1.0002.921Fi Male NGsFlantFlant2.000Fi Male NGSFlant1.0002.921Fi Male NGSFlantFlant2.001Fi Male NGSSalelle Equipment Room1.0002.921Si ArdonArium1.0002.921Si ArdonArium1.0002.921Si ArdonArium1.0002.921 <td>G8 Multi-Faith Room</td> <td>Multi-faith/chapel</td> <td>15.00</td> <td>2.92</td>	G8 Multi-Faith Room	Multi-faith/chapel	15.00	2.92		
First FloorF2 Robing RoomStoreroom9.002.92F3 LobbyAtrium13.102.92F4 Meding RoomLarge meeting rooms (35 m ² floor area)10.002.92F5 Surgical Skills StorageStoreroom50.002.92F6 Meeting RoomLarge meeting rooms (35 m ² floor area)40.002.92F7 Meeting RoomLarge meeting rooms (35 m ² floor area)60.002.92F8 Meeting RoomLarge meeting rooms (>55 m ² floor area)81.002.92F9 Meeting RoomLarge meeting rooms (>55 m ² floor area)81.002.92F1 Meeting RoomLarge meeting rooms (>55 m ² floor area)81.002.92F1 Meeting RoomLarge meeting rooms (>55 m ² floor area)81.002.92F1 Meeting RoomLarge meeting rooms (>55 m ² floor area)81.002.92F1 Meeting RoomSelf area10.002.92F1 Meeting RoomPlant10.002.92F1 LobbyAtrium10.002.92F1 LobbyAtrium10.002.92F1 Ja CK QCToles (not cubicles)10.002.92F1 LobbyAtrium10.002.92S1 LobbyAtrium10.002.92S1 LobbyAtrium10.002.92S1 LobbySoreroom2.002.92S1 LobbyAtrium10.002.92S1 LobbySoreroom3.002.92S1 LobbySoreroom3.002.92S1 LobbySorero	G15 Store	Storeroom	3.80	2.92		
F2 Robing RoomStorenom9.009.292F3 LobbyArum13.002.923F4 Meeting RoomIarge meeting rooms (>35 m² floor area)10.002.929F5 Meeting RoomStorenom2.0202.920F6 Meeting RoomLarge meeting rooms (>35 m² floor area)30.002.920F8 Meeting RoomLarge meeting rooms (>35 m² floor area)50.002.920F0 Meeting RoomLarge meeting rooms (>35 m² floor area)81.002.920F0 Meeting RoomJafte Area1.0002.920F1 Mac KasPlant1.0002.920F1 LabbyArium1.0002.920F1 LabbyArium1.0002.920F1 LabbyArium1.0002.920F1 AcrockTolets (na cubicles)1.0002.920F3 LabbyArium1.0002.920S1 LabbyArium1.0002.920S1 LabbyArium1.0002.920S1 LabbyArium1.0002.920S1 Meeting RoomStoreoom2.0002.920S1 LabbyArium1.0002.920S1 LabbyArium1.0002.920S1 LabbyArium1.0002.920S1 Meeting RoomStoreoom3.000 <td< td=""><td></td><td>First Floor</td><td></td><td></td></td<>		First Floor				
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F4 Meeting RoomLarge meeting rooms (>35 m² floor area)110.002.92F5 Surgical Skills StorageStoreroom75.002.92F6 Meeting RoomSmall meeting rooms (>35 m² floor area)40.002.92F7 Meeting RoomLarge meeting rooms (>35 m² floor area)40.002.92F9 Meeting RoomLarge meeting rooms (>35 m² floor area)56.002.92F0 Meeting RoomLarge meeting rooms (>35 m² floor area)60.002.92AVC Riser#Plant0.002.92Rew Services Riser#Plant0.002.92F11 Male WCSToilets (not cubicles)1.002.92F12 LobbyArtirum2.002.92F13 ACC WCToilets (not cubicles)3.102.92F14 Female WCSToilets (not cubicles)3.102.92S2 Services Riser OMellite Equipment Room6.002.92S4 Meeting RoomLarge meeting rooms (>35 m² floor area)10.902.92S1 LobbyArtirum2.902.922.92S2 Services Riser OMellite Equipment Room10.902.92S2 Services Riser OLarge meeting rooms (>35 m² floor area)10.902.92S2 Surgical Skills StorageStoreroom2.902.92S4 Meeting RoomLarge meeting rooms (>35 m² floor area)10.902.92S5 Surgical Skills StorageStoreroom2.902.92S4 Meeting RoomLarge meeting rooms (>35 m² floor area)8.002.92S5 Meeting RoomLarge meeting rooms	F3 Lobby	Atrium	13.10	2.92		
F5 Surgical Skills StorageStoreroomStore of meeting rooms (<35 m² floor area)31.002.92F6 Meeting RoomLarge meeting rooms (<35 m² floor area)	F4 Meeting Room	Large meeting rooms (>35 m ² floor area)	110.00	2.92		
F6 Meeting RoomSmall meeting rooms (<35 m² floor area)31.002.92F7 Meeting RoomLarge meeting rooms (>35 m² floor area)40.002.92F8 Meeting RoomLarge meeting rooms (>35 m² floor area)81.002.92F9 Meeting RoomLarge meeting rooms (>35 m² floor area)81.002.92A/C Riser#Plant2.902.92Elect. Riser#Plant0.902.92F11 Male WCsToilets (not cubicles)1.002.92F21 LobbyArtium2.002.92F12 LobbyAtrium2.002.92F14 Female WCsToilets (not cubicles)3.102.92F3 ACC WCToilets (not cubicles)3.102.92F14 Female WCsToilets (not cubicles)3.102.92S2 SerSatellite Equipment Room6.402.92S4 Meeting RoomLarge meeting rooms (>35 m² floor area)6.402.92S4 Meeting RoomSare room2.922.92S5 Surgical Skills StorageSore room3.602.92S4 Meeting RoomLarge meeting rooms (>35 m² floor area)3.802.92S6 Meeting RoomLarge meeting rooms (>35 m² floor area)3.802.92S6 Meeting RoomLarge meeting rooms (>35 m² floor area)3.802.92S1 Meeting RoomLarge meeting rooms (>35 m² floor area)3.802.92S1 Meeting RoomLarge meeting rooms (>35 m² floor area)3.802.92S1 Meeting RoomLarge meeting rooms (>35 m² floor area)3.80 <td< td=""><td>F5 Surgical Skills Storage</td><td>Storeroom</td><td>25.00</td><td>2.92</td></td<>	F5 Surgical Skills Storage	Storeroom	25.00	2.92		
F7 Meeting RoomLarge meeting rooms (>35 m² floor area)40.002.92F8 Meeting RoomLarge meeting rooms (>35 m² floor area)81.002.92F9 Meeting Room#Plant2.902.92A/C Riser#Plant0.902.92New Services Riser#Plant1.002.92F1 Male WCsToilets (not cubicles)1.202.92F12 LobbyArium2.902.92F14 Arean BWCsToilets (not cubicles)3.102.92F14 Arean BWCsToilets (not cubicles)3.102.92F2 LobbyToilets (not cubicles)3.102.92F3 ACC WCToilets (not cubicles)3.102.92F3 ACC WCSatellite Equipment Room6.402.92SolbySatellite Equipment Room6.402.92S4 Meeting RoomLarge meeting rooms (>35 m² floor area)10.942.92S5 Surgical Skills StorageStoreroom2.502.92S6 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S7 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S6 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S7 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S6 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S1 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S1 Meeting RoomLarge meeting rooms (>35 m² floor area)38.00 <td< td=""><td>F6 Meeting Room</td><td>Small meeting rooms (≤35 m² floor area)</td><td>31.00</td><td>2.92</td></td<>	F6 Meeting Room	Small meeting rooms (≤35 m² floor area)	31.00	2.92		
F8 Meeting RoomLarge meeting rooms (>35 m² floor area)56.002.92F9 Meeting RoomLarge meeting rooms (>35 m² floor area)81.002.92A/C Riser#Plant0.902.92Elect. Riser#Plant1.002.92New Services Riser#Plant1.002.92F11 Male WCsToilets (not cubicles)12.902.92Services Riser C#Plant2.002.92F12 LobbyAtrium2.002.92F13 ACC WCToilets (not cubicles)3.102.92F14 Female WCsToilets (not cubicles)3.102.92Solots KotterStellite Equipment Room6.402.92S1 LobbyAtrium19.002.92S2 SerSatellite Equipment Room6.402.92S1 LobbyAtrium19.002.92S5 Surgical Skills StorageStoreroom2.92S5 Surgical Skills StorageStoreroom (>35 m² floor area)10.94S5 Surgical Skills StorageStoreroom (>35 m² floor area)3.80S5 Surgical Skills StorageLarge meeting rooms (>35 m² floor area)3.80S5 Surgical Skills StorageStoreroom (>35 m² floor area)3.80S1 Meeting RoomLarge meeting rooms	F7 Meeting Room	Large meeting rooms (>35 m ² floor area)	40.00	2.92		
P9 Meeting RoomLarge meeting rooms (>35 m² floor area)81.002.92A/C Riser#Plant2.902.92Elect. Riser#Plant0.902.92New Services Riser#Plant1.002.92F11 Male WCsToiles (not cubicles)12.902.92Services Riser C#Plant2.002.92F12 LobbyArtium2.002.92F13 ACC WCToiles (not cubicles)3.102.92F14 Female WCsToiles (not cubicles)3.102.92Services Riser CToiles (not cubicles)3.102.92F13 ACC WCToiles (not cubicles)3.102.92Sta CobbyToiles (not cubicles)3.102.92S2 SerSatellite Equipment Room6.402.92S4 Meeting RoomLarge meeting rooms (>35 m² floor area)10.942.92S5 Surgical Skills StorageSoreroom2.922.92S5 Meeting RoomLarge meeting rooms (>35 m² floor area)3.802.92S5 Meeting RoomLarge meeting rooms (>35 m² floor area)3.802.92S5 Meeting RoomLarge meeting rooms (>35 m² floor area)3.802.92S1 Male WCsToiles (not cubicles)3.802.92S1 Maeting RoomLarge meeting rooms (>35 m² floor area)3.802.92S1 Maeting RoomLarge meeting rooms (>35 m² floor area)3.802.92S1 Maeting RoomLarge meeting rooms (>35 m² floor area)3.802.92S1 Maeting RoomLarge meeting room	F8 Meeting Room	Large meeting rooms (>35 m ² floor area)	56.00	2.92		
A/C Riser#Plant2.902.92Flect. Riser#Plant0.902.92New Services Riser#Plant1.002.92F11 Male WCsTolets (not cubicles)1.902.92Services Riser C#Plant2.002.92F12 LobbyArium2.032.92F13 ACC WCTolets (not cubicles)3.102.92F14 Female WCsTolets (not cubicles)3.102.92F14 Female WCsTolets (not cubicles)3.102.92S2 SerSatellite Equipment Room6.402.92S4 Meeting RoomKrium19.302.92S4 Meeting RoomKarium19.302.92S5 Surgical Skills StorageSoreroom2.502.92S7 Meeting RoomIage meeting rooms (>35 m² floor area)3.602.92S7 Meeting RoomLage meeting rooms (>35 m² floor area)3.602.92S7 Meeting RoomLage meeting rooms (>35 m² floor area)3.602.92S1 Male WCsTolets (not cubicles)3.602.92S1 Maeting RoomLage meeting rooms (>35 m² floor area)8.602.92S1 Maeting RoomLage meeting rooms (>35 m² floor area)3.602.92S1 Maeting RoomLage meeting rooms (>35 m² floor area)3.6	F9 Meeting Room	Large meeting rooms (>35 m ² floor area)	81.00	2.92		
Ieter. Riser#Plant0.900.20.21New Services Riser C#Plant1.000.20.21F11 Male WCSGoles (not cubicles)2.000.20.21F21 cubbyMain2.000.20.21F12 LobbyOles (not cubicles)3.102.20.21F14 Female WCSOles (not cubicles)2.102.20.21F34 CC WCToles (not cubicles)2.102.20.21S2 SerSatellite Equipment Room6.402.20.21S3 LobbyArtum19.302.20.21S4 Meeting RoomGarge meeting rooms (>35 m² floor area)19.402.20.21S5 Surgical Skills StorageSore room2.50.212.20.21S7 Meeting RoomLarge meeting rooms (>35 m² floor area)3.80.02.92.21S7 Meeting RoomLarge meeting rooms (>35 m² floor area)3.80.02.92.21S7 Meeting RoomLarge meeting rooms (>35 m² floor area)3.80.02.92.21S7 Meeting RoomLarge meeting rooms (>35 m² floor area)3.80.02.92.21S1 Male WCSIcales (not cubicles)3.80.02.92.21S1 Male WCSIcales (not cubicles)3.80.02.92.21S1 LobbyIcales (not cubicles)3.80.02.92.21S1 Male WCSIcales (not cubicles)3.80.02.92.21S1 Male WCSIcales (not cubicles)3.80.02.92.21S1 LobbyIcales (not cubicles)3.80.02.92.21S1 Male WCSIcales (not cubicles)3.80.02.92.21S1 LobbyIcales (n	A/C Riser	#Plant	2.90	2.92		
New Services Riser#Plant1.002.92F11 Male WCsGolets (not cubicles)12.902.92Fervices Riser C#Plant2.002.92F12 LobbyAtrium2.302.92F13 ACC WCToilets (not cubicles)3.102.92F14 Female WCsToilets (not cubicles)3.102.92Second FloorStellite Equipment Room6.402.92S1 LobbyAtrium9.932.92S4 Meeting RoomKarge meeting rooms (>35 m² floor area)109.402.92S5 Surgical Skills StorageStoreroom25.002.92S6 Meeting RoomLarge meeting rooms (>35 m² floor area)9.002.92S7 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S7 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S7 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S1 Act WCSToilets (not cubicles)13.002.92S1 LobbyAtrium <td< td=""><td>Elect. Riser</td><td>#Plant</td><td>0.90</td><td>2.92</td></td<>	Elect. Riser	#Plant	0.90	2.92		
F11 Male WCsToilets (not cubicles)12.902.92Services Riser C#Plant2.002.92F12 LobbyArium2.302.92F13 ACC WCToilets (not cubicles)3.102.92F14 Female WCsToilets (not cubicles)2.1002.92Staff Female WCsSatellite Equipment Room6.4002.92S2 SerSatellite Equipment Room6.4002.92S1 AbbyArium19.302.92S4 Meeting RoomLarge meeting rooms (>35 m² floor area)109.402.92S5 Surgical Skills StorageStoreroom25.002.92S6 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S7 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S6 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S1 Meeting RoomS1.002.922.92S1 Acc WCToilets (not cubicles)3.002.92S1 LobbyCalles (not cubicles)3.002.92S1 Acc WCToilets (not cubicles)3.702.92S1 Acc WCToilets (not cubicles)3.702.92S1 Acc WCTo	New Services Riser	#Plant	1.00	2.92		
Services Riser C#Plant2.002.92F12 LobbyArium2.302.92F13 ACC WCToilets (not cubicles)3.102.92F14 Female WCsToilets (not cubicles)2.1402.92SCORD FOOTStellite Equipment Room6.402.92S1 LobbyStellite Equipment Room6.402.92S3 LobbyAtrium19.302.92S4 Meeting RoomKarge meeting rooms (>35 m² floor area)109.402.92S5 Surgical Skills StorageStoreroom25.002.92S6 Meeting RoomKarge meeting rooms (>35 m² floor area)38.002.92S7 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S7 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S1 Male MCsLarge meeting rooms (>35 m² floor area)38.002.92S1 LobbyLarge meeting rooms (>35 m² floor area)38.002.92S1 LobbyLarge meeting rooms (>35 m² floor area)3.002.92S1 LobbyLarge m	F11 Male WCs	Toilets (not cubicles)	12.90	2.92		
F12 LobbyAtrium2.302.92F13 ACC WCToilets (not cubicles)3.102.92F14 Female WCsToilets (not cubicles)21.402.92SCOM FloorSecond Floor5254S2 SerSatellite Equipment Room6.402.92S4 Meeting Room19.302.9254S5 My Scong Kals StorageStoreroom (S35 m² floor area)19.402.92S6 Meeting RoomSatel Regemeeting rooms (>35 m² floor area)32.502.92S7 Meeting RoomSatel Regemeeting rooms (>35 m² floor area)32.502.92S7 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S7 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S9 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S1 Male WCsIoites (not cubicles)13.802.92S11 Male WCsToilets (not cubicles)31.802.92S12 LobbyAtriumS1.602.92S12 LobbyToilets (not cubicles)3.702.92S12 LobbyToilets (not cubicles)3.702.92S12 LobbyToilets (not cubicles)3.702.92T13 CMCToilets (not cubicles)3.702.92S12 LobbySatellite Equipment Room1.802.92T2 SerSatellite Equipment Room1.802.92S13 ChifeSigle-person fiftee2.903.92S14 FendelSatellite Equipment Room3.802.92<	Services Riser C	#Plant	2.00	2.92		
F13 ACC WCToilets (not cubicles)3.102.92F14 Female WCsToilets (not cubicles)21.402.92S2 SerSatellite Equipment Room6.402.92S3 LobbyAtrium19.302.92S4 Meeting RoomLarge meeting rooms (>35 m² floor area)109.402.92S5 Surgical Skills StorageStororom25.002.92S6 Meeting RoomSmall meeting rooms (>35 m² floor area)38.002.92S7 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S7 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S9 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S1 Male WCsLarge meeting rooms (>35 m² floor area)89.402.92S11 Male WCsOilets (not cubicles)13.802.92S12 LobbyAtrium101ets (not cubicles)31.002.92S13 Acc WCOilets (not cubicles)3.702.92S12 LobbyAtrium2.002.922.92S13 Acc WCOilets (not cubicles)3.702.92T2 SerSatellite Equipment Room1.802.92T2 SerSatellite Equipment Room1.802.92S10 FloorSigle-person office2.902.92T1 RCOG OfficesOpen-plan office (>5 people)36.002.92	F12 Lobby	Atrium	2.30	2.92		
F14 Female WCsToilets (not cubicles)21.402.92S2 SerSatellite Equipment Room6.402.92S3 LobbyAtrium19.302.92S4 Meeting RoomLarge meeting rooms (>35 m² floor area)109.402.92S5 Surgical Skills StorageStoreroom25.002.92S6 Meeting RoomStoreroom32.002.92S7 Meeting RoomLarge meeting rooms (>35 m² floor area)32.002.92S7 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S7 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S9 Meeting RoomLarge meeting rooms (>35 m² floor area)89.402.92S1 Male WCsLarge meeting rooms (>35 m² floor area)89.402.92S1 Male WCsSides (not cubicles)13.802.92S14 Female WCsToilets (not cubicles)13.802.92S12 LobbyAtrium2.032.92S13 Acc WCToilets (not cubicles)3.002.92T2 SerSidelite Equipment Room1.802.92T2 SerSingle-person office27.902.92T1 RCOG OfficesOpen-plan office (<5 people)	F13 ACC WC	Toilets (not cubicles)	3.10	2.92		
S2 SerSatellite Equipment Room6.402.92S1 LobbyAtrium19.302.92S4 Meeting RoomLarge meeting rooms (>35 m² floor area)10.9402.92S5 Surgical Skills StorageStoreroom25.002.92S6 Meeting RoomSmall meeting rooms (>35 m² floor area)32.002.92S7 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S7 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S9 Meeting RoomLarge meeting rooms (>35 m² floor area)89.402.92S1 Male WCsLarge meeting rooms (>35 m² floor area)89.402.92S1 At PomoLarge meeting rooms (>35 m² floor area)89.402.92S1 At PomoLarge meeting rooms (>35 m² floor area)13.802.92S1 At PomoToiles (not cubicles)2.302.92S1 At PomoToiles (not cubicles)3.002.92S1 At PomoToiles (not cubicles)3.002.92S1 At PomoToiles (not cubicles)3.002.92S1 At PomoSatellite Equipment Room1.802.92S1 At PomoSatellite Equipment Room1.80<	F14 Female WCs	Toilets (not cubicles)	21.40	2.92		
S2 SerSatellite Equipment Room6.402.92S3 LobbyAtrium19.302.92S4 Meeting RoomLarge meeting rooms (>35 m² floor area)109.402.92S5 Surgical Skills StorageStoreroom25.002.92S6 Meeting RoomSmall meeting rooms (>35 m² floor area)32.002.92S7 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S8 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S9 Meeting RoomLarge meeting rooms (>35 m² floor area)56.302.92S1 Male WCsLarge meeting rooms (>35 m² floor area)89.402.92S11 Male WCsToilets (not cubicles)13.802.92S12 LobbyAtrium21.602.92S13 Acc WCToilets (not cubicles)3.702.92T1X FloorThird Floor11.802.92T2 SerSatellite Equipment Room1.802.92T3 OfficeSingle-person office27.902.92T1 RCOG OfficesOpen-plan office (>5 people)36.602.92		Second Floor				
S3 LobbyAtrium19.302.92S4 Meeting RoomLarge meeting rooms (>35 m² floor area)109.402.92S5 Surgical Skills StorageStoreroom25.002.92S6 Meeting RoomSmall meeting rooms (>35 m² floor area)32.502.92S7 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S8 Meeting RoomLarge meeting rooms (>35 m² floor area)36.002.92S9 Meeting RoomLarge meeting rooms (>35 m² floor area)89.402.92S11 Male WCsToilets (not cubicles)31.802.92S12 LobbyAtrium2.302.92S13 Acc WCToilets (not cubicles)3.702.92T2 SerSatellite Equipment Room1.802.92T2 SerSatellite Equipment Room1.802.92T3 OfficeSingle-person office (≥5 people)36.002.92	S2 Ser	Satellite Equipment Room	6.40	2.92		
S4 Meeting RoomLarge meeting rooms (>35 m² floor area)109.402.92S5 Surgical Skills StorageStoreroom25.002.92S6 Meeting RoomSmall meeting rooms (<35 m² floor area)	S3 Lobby	Atrium	19.30	2.92		
S5 Surgical Skills StorageStoreroom25.002.92S6 Meeting RoomSmall meeting rooms (<35 m² floor area)	S4 Meeting Room	Large meeting rooms (>35 m ² floor area)	109.40	2.92		
S6 Meeting RoomSmall meeting rooms (<35 m² floor area)32.502.92S7 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S8 Meeting RoomLarge meeting rooms (>35 m² floor area)56.302.92S9 Meeting RoomLarge meeting rooms (>35 m² floor area)89.402.92S1 Male WCsToilets (not cubicles)13.802.92S14 Female WCsToilets (not cubicles)21.602.92S12 LobbyAtrium2.302.92S13 Acc WCToilets (not cubicles)3.702.92T2 SerSatellite Equipment Room1.802.92T3 OfficeSingle-person office (<5 people)	S5 Surgical Skills Storage	Storeroom	25.00	2.92		
S7 Meeting RoomLarge meeting rooms (>35 m² floor area)38.002.92S8 Meeting RoomLarge meeting rooms (>35 m² floor area)56.302.92S9 Meeting RoomLarge meeting rooms (>35 m² floor area)89.402.92S11 Male WCsToilets (not cubicles)13.802.92S14 Female WCsToilets (not cubicles)21.602.92S12 LobbyAtrium2.302.92S13 Acc WCToilets (not cubicles)3.702.92T2 SerSatellite Equipment Room1.802.92T3 OfficeSingle-person office (>5 people)36.002.92	S6 Meeting Room	Small meeting rooms (≤35 m² floor area)	32.50	2.92		
S8 Meeting RoomLarge meeting rooms (>35 m² floor area)56.302.92S9 Meeting RoomLarge meeting rooms (>35 m² floor area)89.402.92S11 Male WCsToilets (not cubicles)13.802.92S14 Female WCsToilets (not cubicles)21.602.92S12 LobbyAtrium2.302.92S13 Acc WCToilets (not cubicles)3.702.92T2 SerSatellite Equipment Room1.802.92T3 OfficeSingle-person office (≥5 people)366.002.92	S7 Meeting Room	Large meeting rooms (>35 m ² floor area)	38.00	2.92		
S9 Meeting RoomLarge meeting rooms (>35 m² floor area)89.402.92S11 Male WCsToilets (not cubicles)13.802.92S14 Female WCsToilets (not cubicles)21.602.92S12 LobbyAtrium2.302.92S13 Acc WCToilets (not cubicles)3.702.92T2 SerSatellite Equipment Room1.802.92T3 OfficeSingle-person office27.902.92T1 RCOG OfficesOpen-plan office (≥5 people)366.002.92	S8 Meeting Room	Large meeting rooms (>35 m ² floor area)	56.30	2.92		
S11 Male WCsToilets (not cubicles)13.802.92S14 Female WCsToilets (not cubicles)21.602.92S12 LobbyAtrium2.302.92S13 Acc WCToilets (not cubicles)3.702.92Third FloorT2 SerSatellite Equipment Room1.802.92T3 OfficeSingle-person office27.902.92T1 RCOG OfficesOpen-plan office (≥5 people)366.002.92	S9 Meeting Room	Large meeting rooms (>35 m ² floor area)	89.40	2.92		
S14 Female WCsToilets (not cubicles)21.602.92S12 LobbyAtrium2.302.92S13 Acc WCToilets (not cubicles)3.702.92Third FloorT2 SerSatellite Equipment Room1.802.92T3 OfficeSingle-person office27.902.92T1 RCOG OfficesOpen-plan office (≥5 people)366.002.92	S11 Male WCs	Toilets (not cubicles)	13.80	2.92		
S12 LobbyAtrium2.302.92S13 Acc WCTollets (not cubicles)3.702.92Third FloorT2 SerSatellite Equipment Room1.802.92T3 OfficeSingle-person office27.902.92T1 RCOG OfficesOpen-plan office (≥5 people)366.002.92	S14 Female WCs	Toilets (not cubicles)	21.60	2.92		
S13 Acc WCToilets (not cubicles)3.702.92Third FloorT2 SerSatellite Equipment Room1.802.92T3 OfficeSingle-person office27.902.92T1 RCOG OfficesOpen-plan office (≥5 people)366.002.92	S12 Lobby	Atrium	2.30	2.92		
Third Floor T2 Ser Satellite Equipment Room 1.80 2.92 T3 Office Single-person office 27.90 2.92 T1 RCOG Offices Open-plan office (≥5 people) 366.00 2.92	S13 Acc WC	Toilets (not cubicles)	3.70	2.92		
T2 SerSatellite Equipment Room1.802.92T3 OfficeSingle-person office27.902.92T1 RCOG OfficesOpen-plan office (≥5 people)366.002.92		Third Floor				
T3 Office Single-person office 27.90 2.92 T1 RCOG Offices Open-plan office (≥5 people) 366.00 2.92	T2 Ser	Satellite Equipment Room	1.80	2.92		
T1 RCOG Offices Open-plan office (≥5 people) 366.00 2.92	T3 Office	Single-person office	27.90	2.92		
	T1 RCOG Offices	Open-plan office (≥5 people)	366.00	2.92		

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Room	HTM Classification	Area (m2)	Height (m)
T4 MTG Room	Small meeting rooms (≤35 m² floor area)	13.70	2.92
T5 Pres Office	Multi-person office (2-4 people)	12.30	2.92
T6 Ser	Satellite Equipment Room	15.10	2.92
T9 Exist. Male WCs	Toilets (not cubicles)	11.50	2.92
T10 Lobby	Atrium	5.30	2.92
T11 Exist. Female WCs	Toilets (not cubicles)	11.70	2.92
T12 Acc. WC	Toilets (not cubicles)	7.00	2.92
T7 MTG Room	Small meeting rooms (≤35 m² floor area)	6.20	2.92
T8 MTG Room	Small meeting rooms (≤35 m² floor area)	6.20	2.92