KOIKAS ACOUSTICS PTY LTD
CONSULTANTS IN NOISE & VIBRATION
ABN 12 058 524 771
Commercial 1 (Unit 27)
637 - 645 Forest Road
Ph: (02) 9587 9702
Fax: (02) 9587 5337

ACOUSTIC ASSESSMENT

RAIL/ROAD NOISE AND VIBRATION

NO. 141 WALDRON ROAD, CHESTER HILL

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Koikas Acoustics Pty Ltd
Commercial 1, Unit 27,
637-645 Forest Road,
Bexley NSW 2207

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Prepared By	James Tsevrementzis	
Approved By	Nick Koikas	
Prepared for	Waldron Hill Projects Pty Ltd E-mail:	
Care of	C/o CMT Architects Australia Pty Ltd Attention: Athena Hatgivlastis E-mail: athena@cmtarchitects.com	

ACOUSTIC ASSESSMENT

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NO. 141 WALDRON ROAD, CHESTER HILL

1.0 INTRODUCTION

Koikas Acoustics Pty Ltd was commissioned by Athena Hatgivlastis to undertake an acoustic assessment for the residential development at No. 141 Waldron Road, Chester Hill.

The aim of this assessment is to ascertain the type and extent of noise mitigation measures required to achieve the nominated noise criteria.

Briefly, the assessment considers the following:

- Rail noise and vibrations intrusion,
- Road traffic noise instrusion.

Recommendations are provided in order to satisfy the minimum requirements of the Building Codes of Australia (BCA) and Bankstown City Council DCP 2005 requirements.

2.0 NOISE CRITERIA

2.1 NSW DEPARTMENT OF PLANNING AND INFRASTRUCTURE

Noise that is generated by vehicles using Waldron Road and the Bankstown rail corridor will impact upon future tenants of the development. Therefore adequate building materials need to be considered to achieve acceptable indoor design sound levels.

Road and rail traffic criteria are discussed in the *NSW Department of Planning and Infrastructure (NSW DoPI) Developments near Rail Corridors and Busy Roads, Interim Guidelines*.

Road traffic is typically a constant noise along busy roads. In this case, traffic dominates the ambient noise environment in the area. The sound power levels of road transport were derived from the noise logger data located adjacent to Waldron Road.

The calculated sound power levels were derived from the traffic and rail surveys and used in acoustic modelling to predict the $L_{Aeq,15\ hour}$ and $L_{Aeq,9hour}$ noise levels at each facade and floor level of the proposed development. Forecasting noise levels 10 years in advance is required by AS3671.1989. A 2% p.a. forecast annual increase in traffic volumes was considered for Waldron Road. This is equivalent to a 1 dB increase in traffic noise.

The current NSW DoPI document is based on criteria and noise targets published within the SEPP (Infrastructure) 2007 and Clauses 87 and 102 which specifically relate to noise associated with road and rail impacts.

87 Impact of rail noise or vibration on non-rail development

(1) This clause applies to development for any of the following purposes that is on land in or adjacent to a rail corridor and that the consent authority considers is likely to be adversely affected by rail noise or vibration:

(a) a building for residential use,
(b) a place of public worship,
(c) a hospital,
(d) an educational establishment or child care centre.

(2) Before determining a development application for development to which this clause applies, the consent authority must take into consideration any guidelines that are issued by the Director-General for the purposes of this clause and published in the Gazette.

(3) If the development is for the purposes of a building for residential use, the consent authority must not grant consent to the development unless it is satisfied that appropriate measures will be taken to ensure that the following LAeq levels are not exceeded:

(a) in any bedroom in the building—35 dB(A) at any time between 10.00 pm and 7.00 am,
(b) anywhere else in the building (other than a garage, kitchen, bathroom or hallway)—40 dB(A) at any time.

102 Impact of road noise or vibration on non-road development

(1) This clause applies to development for any of the following purposes that is on land in or adjacent to the road corridor for a freeway, a tollway or a transit-way or any other road with an annual average daily traffic volume of more than 40,000 vehicles (based on the traffic volume data published on the website of the RTA) and that the consent authority considers is likely to be adversely affected by road noise or vibration:

(a) a building for residential use,
(b) a place of public worship,
(c) a hospital,
(d) an educational establishment or child care centre.

(2) Before determining a development application for development to which this clause applies, the consent authority must take into consideration any guidelines that are issued by the Director-General for the purposes of this clause and published in the Gazette.

(3) If the development is for the purposes of a building for residential use, the consent authority must not grant consent to the development unless it is satisfied that appropriate measures will be taken to ensure that the following LAeq levels are not exceeded:

(a) in any bedroom in the building—35 dB(A) at any time between 10 pm and 7 am,
(b) anywhere else in the building (other than a garage, kitchen, bathroom or hallway)—40 dB(A) at any time.

(4) In this clause, freeway, tollway and transit-way have the same meanings as they have in the Roads Act 1993.

In summary, the indoor noise level criteria are as follows:

Bedroom	night time	10pm and 7am	Leq, 9 hours	35dB(A)
Bedroom	daytime	7am and 10 pm	Leq, 15 hours	40dB(A)

Anywhere else in the building (other than a garage, kitchen, bathroom or hallway)

Living space	night time	10pm and 7am	Leq, 9 hours	40dB(A)
Living space	day time	7am and 10pm	Leq, 15 hours	40dB(A)

2.2 ACOUSTIC PRIVACY BETWEEN UNITS

2.2.1 Building Code of Australia (BCA)

Volume 1 of the BCA refers to three relevant classes of residential buildings:

Class 2:	Flat or apartments with two or more dwellings (units);
Class 3:	Boarding house, hotel or residential part of other buildings;
Class 9c:	Aged Care Buildings.

For this class of buildings, services must not be compromised by:

- The incorporation or penetration of a pipe or other surface element for Class 2, 3 and 9c
- A door assembly for Class 2 and 3

Partitions for this class are to comply with Part F5 Sound Insulation of the Building Code of Australia.

Volume 2 of the BCA refers to one relevant class of residential buildings:

Class 1(a):	Detached house, terrace, villa
Class 1(b):	boarding house, guest house, hostel.

For this class of buildings, services must not be chased into concrete or masonry separating walls.

Partitions for this class are to comply with Part 3.8.6 Sound Insulation of the Building Code of Australia.

As this subject site is separated by common partition walls, there is the potential for noise emanating from one premise to adversely impact the acoustic amenity of residents within the adjoining premises.

To comply with the BCA the following are also required:

- *Junction between walls and roof must be sealed in accordance with Figure 3.8.6.2 of Part 3.8.6.3 of BCA;*

- *Masonry partition systems must be laid with all joints filled solid, except for adequately sound insulated articulation joints, including those between the masonry and any adjoining construction;*

- *Solid filled to joints between concrete panels and any adjoining construction;*

- *Where one layer of plasterboard is required on both sides of a wall system, joints must be staggered on opposite sides (Refer to Figure 3.8.6.3 of Part 3.8.6.3 of BCA);*

- *Where one layer of plasterboard is required, the first layer must be installed in accordance to the above and the second layer joints must not coincide with those of the first layer;*

- *Outer layer joints between sheets must be taped and filled solid;*

- *Joints between sheets and any adjoining construction must be taped and filled solid;*

- *Steel framing and perimeter members must not be less than 0.6 mm in thickness;*

- *Steel studs must be not less than 63 mm in depth unless another depth is specified in Table 3.8.6.2 of BCA;*

- *Steel/timbers studs must be fixed to steel top and bottom plates with sufficient depth to permit secure fixing of the plasterboard;*

- *All steel/timber members at the perimeter of the wall are required to be securely fixed to the adjoining structure and bedded in resilient compound or the joints must be caulked so that there are no voids between the steel members and the wall;*

- *Structure members such as noggings or the likes must not bridge between timber studs supporting different wall leaves;*

- *Services must not be chased into concrete or masonry separating walls;*

- *If a duct, soil, waste, water supply or storm water pipe serves or passes through a separating wall or is located in a separating wall:*
    - *A door or panel providing access to a duct or pipe required to be separated must –*
        - *Not open into any habitable room, other than a kitchen, and*
        - *In any other part must be firmly fixed so as to overlap the frame or rebate of the frame by not less than 10 mm and be constructed of:*
            i. *Wood, plasterboard or blockboard not less than 33 mm thick, or*

ii. Compressed fibre reinforced cement sheeting, note less than 9 mm thick, or

iii. Other suitable material with a mass per unit area not less than 24.4 kg/m2, and

- *In the case of a water supply pipe, it must –*

  - *Only be installed in discontinuous construction, and*

  - *In the case of a water supply pipe that serves one swelling, not be fixed to the wall leaf on the side of any other dwelling and have a clearance not less than 10 mm to the other wall leaf;*

- *Electrical outlets must be offset from each other –*

  - *In masonry walling, not less than 100 mm; and*

  - *In timber or steel framed walling, not less than 300 mm.*

Sound Insulation of Walls

- Where a habitable room in one sole occupancy unit adjoins a wet area in an adjoining sole occupancy unit, the separating wall is to achieve a weighted sound reduction index with spectrum adaptation terms (Rw + Ctr) of no less than 50 and be of a discontinuous construction. A discontinuous construction consists of a wall with two leaves separated by a minimum air gap of 20mm and, for masonry type construction where brick ties are required they are of the resilient type, or for any other type construction no mechanical linkage between the two leaves exists except at the periphery. Periphery refers to the end of the walls, the sub-base below and above.

- Where a habitable room in one sole occupancy unit adjoins a habitable room in another sole occupancy unit, the separating wall is to achieve a weighted sound reduction index with spectrum adaptation terms (Rw + Ctr) of no less than 50.

- Where a habitable room in one sole occupancy unit adjoins a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification an acoustic rating of Rw not less 50 is required.

Sound Insulation Ratings Of Floors

A floor in a Class 2 or 3 and 9(c) building must have an Rw+Ctr (airborne) not less than 50 and an Ln,w+Ci (impact) not more than 62 if it separates –

(i) sole-occupancy units; or

(ii) a sole-occupancy unit from a plant room, lift shaft, stairway, public corridor, public lobby or the like, or part of a different classification.

Sound Insulation Ratings Of Services

If a duct, soil, waste or water supply pipe, including a duct or pipe that is located in a wall or floor cavity, serves or passes through more than one sole-occupancy unit, the duct or pipe must be separated from the rooms of any sole-occupancy unit by construction with an Rw+Ctr (airborne) not less than-

(i) 40 if the adjacent room is a habitable room (other than a kitchen); or

(ii) 25 if the adjacent room is a kitchen or non-habitable room.

If a storm water pipe passes through a sole-occupancy unit it must be separated in accordance with (i) and (ii) above.

3.0 NOISE SURVEY

3.1 NOISE MONITORING PROCEDURES

All noise methodologies and equipment used comply with the following Australian Standards:

- *AS1259.2-1990 "Acoustics - Sound Level Meters - Integrating - Averaging", and*
- *ISO 1996-2007 "Acoustics – Description, measurement and assessment of environmental noise" Part 2: Determination of environmental noise levels".*

3.2 SURVEY DATES AND DURATION

Unattended noise monitoring survey was conducted by Koikas Acoustics at No. 141 Waldron Road, Chester Hill to determine the ambient noise conditions pertaining to the area.

The survey was conducted between Saturday 11th April and Friday 17th April 2015.

3.3 METEOROLOGICAL CONDITIONS

Analysis of the meteorological records and measured ambient noise levels suggest that meteorological conditions did affect noise levels on Saturday 11th April, Thursday 16th April and Friday 17th April, 2015. These days consisted of rainfall which affected noise level measurements. Noise level data adversely affected by inclement weather was not used in determining the ambient and ambient background noise level summary results. Refer to **Appendix G** for Bankstown weather observations from the Bureau of Meteorology.

3.4 SURVEY INSTRUMENTATION

Attended vibration measurements were taken with a Type 1 SVAN 912AE spectrum analyser S/N 2312. Measurements of rail pass-by could not be measured as vibration levels were insignificant. This instrument carries NATA calibration certification.

The unattended noise monitoring survey was conducted with Svantek 949 octave band sound level meter data logger.

4.0 NOISE SURVEY RESULTS

4.1 ATTENDED NOISE SURVEY RESULTS

The measured noise levels obtained from the attended noise surveys are shown in Tables 1 and 2.

Table 1. Summary of Unattended Noise Survey Results [dBA]		
NOISE METRICS	**PERIOD [hours]**	**Noise Level**
L_{90}, daytime	0700-1800 0800-1800 (Sunday/Public Holiday)	52
L_{90}, evening	1800-2200	60
L_{90}, night-time	2200-0700 2200-0800 (Sunday/Public Holiday)	53
L_{eq}, daytime	0700-1800 0800-1800 (Sunday/Public Holiday)	68
L_{eq}, evening	1800-2200	68
L_{eq}, night-time	2200-0700 2200-0800 (Sunday/Public Holiday)	65

Table 2. Summary Rail/Road Measured Noise Levels in Octave Bands [dBA]											
	Frequency [Hz]	*31.5*	*63*	*125*	*250*	*500*	*1000*	*2000*	*4000*	*8000*	*Total A*
L_{eq} 15 hours (Day)	0700-2200	33	47	53	56	59	64	62	57	52	68
L_{eq} 9 hours (Night)	2200-0700 2200-0800 (Sunday/Public Holiday)	27	42	49	53	57	61	59	53	47	65

Table 3. Calculated Rail/Road Sound Power Levels [dBA/m]											
	FREQUENCY [Hz]	*31.5*	*63*	*125*	*250*	*500*	*1000*	*2000*	*4000*	*8000*	*Total A*
Track 1 Commuter Train	**Day time Lw,15hrs**	***29***	***44***	***54***	***52***	***54***	***58***	***56***	***51***	***41***	***63***
	Night-time [Lw, 9hr]	*25*	*40*	*50*	*49*	*50*	*54*	*52*	*47*	*38*	*59*
Track 2 Commuter Train	**Day time [Lw,15hr]**	***39***	***54***	***63***	***68***	***68***	***71***	***70***	***62***	***49***	***76***
	Night-time [Lw, 9hr]	*35*	*51*	*60*	*65*	*65*	*68*	*67*	*59*	*45*	*73*
Road Traffic along Waldron Road	**Day time [Lw,15hr]**	***43***	***57***	***64***	***67***	***69.5***	***74***	***72***	***68***	***64.5***	***78.3***
	Night-time [Lw, 9hr]	*40*	*54*	*61*	*64*	*66.5*	*71*	*69*	*65*	*61.5*	*75.3*

Note: The sound power levels shown in Table 3 are dBA/metre. Variations in the sound power levels/m arise on account of the noise interaction between the trains with each track during the pass-by.

4.2 CALCULATED VIBRATION LEVEL

Vibration measurements could not be taken because vibration levels were not measureable during train pass-by on account of the distance between the rail tracks and the subject development. No vibration controls are required for this development.

5.0 NOISE MODELLING

5.1 CADNA/A NOISE MODEL

Noise level predictions were calculated using CADNA (A), a software package developed by DataKustik. Cadna (A) incorporates a computer aided drafting (CAD) program which utilises the height of the ground, the position of buildings and other structures to run through a set of algorithms and calculate at user defined grid points and user input receiver locations the overall sound pressure level and frequency dependant noise level spectrum. It then interpolates the calculated noise levels at each of the grid points to produce noise level contours.

The noise level calculations take into account the propagation of sound from a sound source as a function of its distance, the shielding effects of barriers and buildings, the attenuation and reflection off the ground and buildings.

Receiver noise locations were assigned along the periphery of the subject development building within the CadnaA computer model. The calculated spectral levels at the receiver noise locations were used to determine the type and extent of building materials required to the building envelope (walls, windows, doors ceiling/roof systems) to achieve adequate noise attenuation and meet the indoor nominated traffic noise levels described in Section 2.1 of this report.

5.2 CALCULATED NOISE LEVEL CONTOUR RESULTS

Noise level contours were produced where necessary to illustrate the propagation of sound from the noise sources to the most noise affected receiver location. Noise level contours maps are attached in **Appendix C**.

Maximum $L_{Aeq, Period}$ noise levels to the subject premise were calculated to be **68dB(A)** for the daytime and **65 dB(A)** for the night-time. The units most affected by road and rail noise are those that front Waldron Road. A maximum noise reduction of 28dB is required during the daytime and 30dB during the night-time to meet the indoor design sound levels.

6.0 RECOMMENDATIONS

6.1 SELECTION OF BUILDING MATERIALS

6.1.1 Ceiling / Roof System

The proposed ceiling/roof system with a minimum of 200 mm thick concrete base and one layer of 10 mm plasterboard will be satisfactory. Cavity ceiling/roof systems will require a minimum of 50 mm thick, 20 kg/m^3 insulation batts.

Alternatively, light-weight ceiling/floor structure with the following building materials:

- 0.42 mm metal deck roof followed by;
- a layer of 100 mm thick 20 kg/m^3 insulation batts fitted tightly between the ceiling joists, and
- one layer of 13 mm thick plasterboard screw fixed beneath
- Minimum cavity 250 mm between the concrete slab and the plasterboard ceiling.

6.1.2 External Walls

The AFS 162 LOGICWALL will be satisfactory. This consists of 6mm thick fibre cements sheets on both side of a steel stud frame where the core is filled with cement, with the option of horizontal and vertical steel reinforcement.

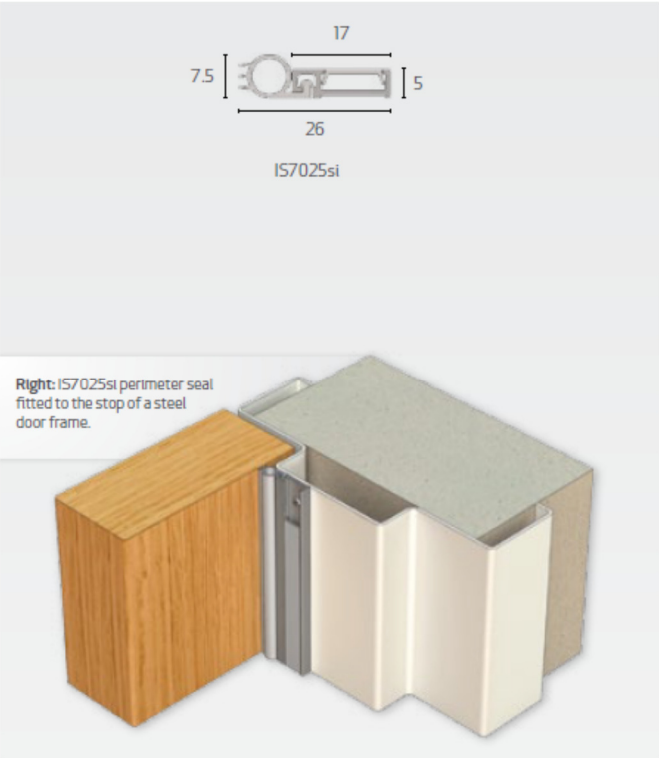
6.1.3 Windows/Sliding Doors

The required minimum glazing thickness of the windows and the sliding doors are presented in Appendix F below.

6.1.4 Hinged Doors

The hinged doors can be constructed of:

- 40mm solid core timber fitted with Lorient IS7025 and IS8011si seals, or
- 10.38mm laminated glazing in an aluminium or steel framing fitted with Lorient IS7025 and IS8011si seals.



The following is to be noted:

- As stated in the disclaimer above it is the client's responsibility to ensure the appropriate glazing satisfies all performance requirements.
- All open-able windows and glazed door systems should be air tight when closed and should be built into a solid frame.
- Q-lon type seals should be fitted along the perimeter of all glazing systems to minimise air gaps. This is not required if the windows seals properly. If the windows/doors are not designed to be air-tight when closed, the total noise attenuation performance of the walls and ceiling-roof system will be reduced.
- Acoustic windows/doors do not normally get tested with "weep holes". "Weep holes" will reduce the acoustic attenuation of single glazed systems and to a lesser extent double glazed systems. However, for double glazed windows, weep holes will not significantly reduce the acoustic performance.

6.2 MECHANICAL VENTILATION

People occupying habitable spaces that are affected by traffic noise intrusion may require that they keep windows/doors closed in order to achieve the indoor design sound levels recommended. Therefore in order to meet the Codes and recommendations of relevant Australian Standards it will be necessary to provide additional ventilation to these particular spaces. Additional ventilation is to be compliant with relevant provisions of the BCA.

It is generally accepted that with windows or doors opened to provide sufficient natural ventilation to a room, the indoor noise level is generally 10 dB below the outside noise level. Therefore, where outdoor noise levels are greater than 10 dB above the indoor design sound level criteria, then windows and doors will need to be closed in order to satisfy the criteria.

Based on calculated external traffic noise levels shown in Table 1, additional BCA compliant ventilation will be required to all habitable spaces.

It is noted, indoor traffic noise contributions via the mechanical ventilation plant should be at least 10 dB lower than the recommended indoor sound level for traffic noise intrusion. This will ensure that the contribution of traffic noise intrusion and mechanical plant noise does not exceed the nominated indoor sound levels.

There are two (2) options that are acoustically viable that can satisfy the additional ventilation requirement:

OPTION 1: Mechanical ventilation

A small air supply fan unit with a minimum 4 metres length of acoustically lined to the inner side of the duct with 50 mm thick insulation. See details attached in Appendix B.

OPTION 2: Fresh air supply to air conditioning

Connecting a fresh air supply to the air handling unit of the nominated air conditioning system. May not be applicable for all types of air conditioning systems. Please contact AC supplier to verify.

Consultation with a mechanical services consultant is recommended to ensure that any adopted air supply approach is compliant with BCA and applicable Australian design standards. Alternative designs could be considered provided that noise intrusion is minimised and the internal noise levels do not exceed the nominated sound criteria levels. Mechanical ventilation details are attached in **Appendix E**.

7.0 ACOUSTIC PRIVACY BETWEEN UNITS

7.1 SUMMARY OF ACOUSTIC PARTITION RATINGS (CLASS 1, 2 OR 3 AND 9C BUILDINGS)

RECEIVER Space (Sole Occupancy Unit)	SOURCE Space (Sole Occupancy Unit)	Rw	Rw + Ctr	Wall Type
Habitable	Habitable		50	any
Habitable *(other than kitchen)*	Laundry rooms		50	discontinuous
Habitable	Kitchen		50	discontinuous
Habitable	Bathroom		50	discontinuous
Habitable	Sanitary compartment		50	discontinuous
Habitable	Laundry		50	discontinuous
Any space	Lift shaft	50		discontinuous
Any space	plant room	50		discontinuous
Habitable or wet areas	Stairway	50		
Habitable	Public corridor	50		
Habitable	Public lobby	50		
Door in habitable space		30		
Soil and waste services in habitable room			40	
Soil and waste in kitchen or non-habitable space			25	
Storm water pipes in habitable space			40	
Storm water pipe in kitchen or non-habitable space			25	

As per Table 2 of the BCA *Acceptable Forms of Construction* the following partition wall systems are recommended. It is noted that the BCA may require multiple different types of partition walls in the one development depending on the use of the rooms which the partition wall separates.

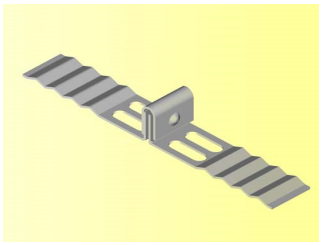
8.0 RECOMMENDED PARTITION SYSTEMS

8.1 WALLS

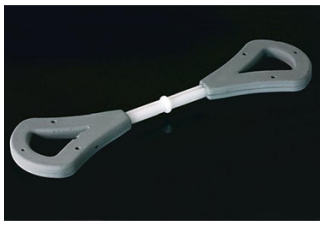
Masonry Walls

A masonry wall system that is expected to achieve:
Rw + Ctr 50 and is
Discontinuous providing impact rating:

- two leaves of solid 110mm thick clay masonry bricks with
- cavity not less than 50mm between leaves
- 13mm thick render on each outside face
- *the two leaves separated with acoustic wall ties (eg Matrix Industries ph 6553 2577) type MB-01,*

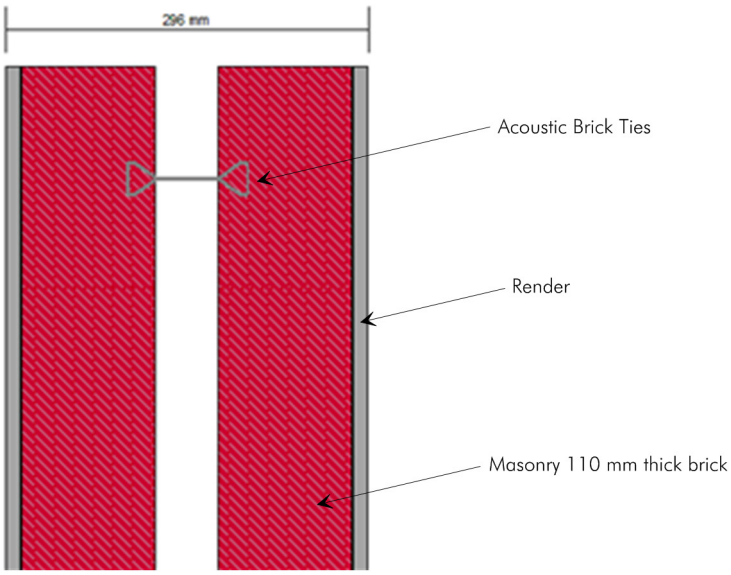


- *or polymer Ni-Ties polymer plastic acoustic brick ties from Vespol Pty Ltd or Novaplas Pty Ltd*



- *or, not physically connected with any brick ties*

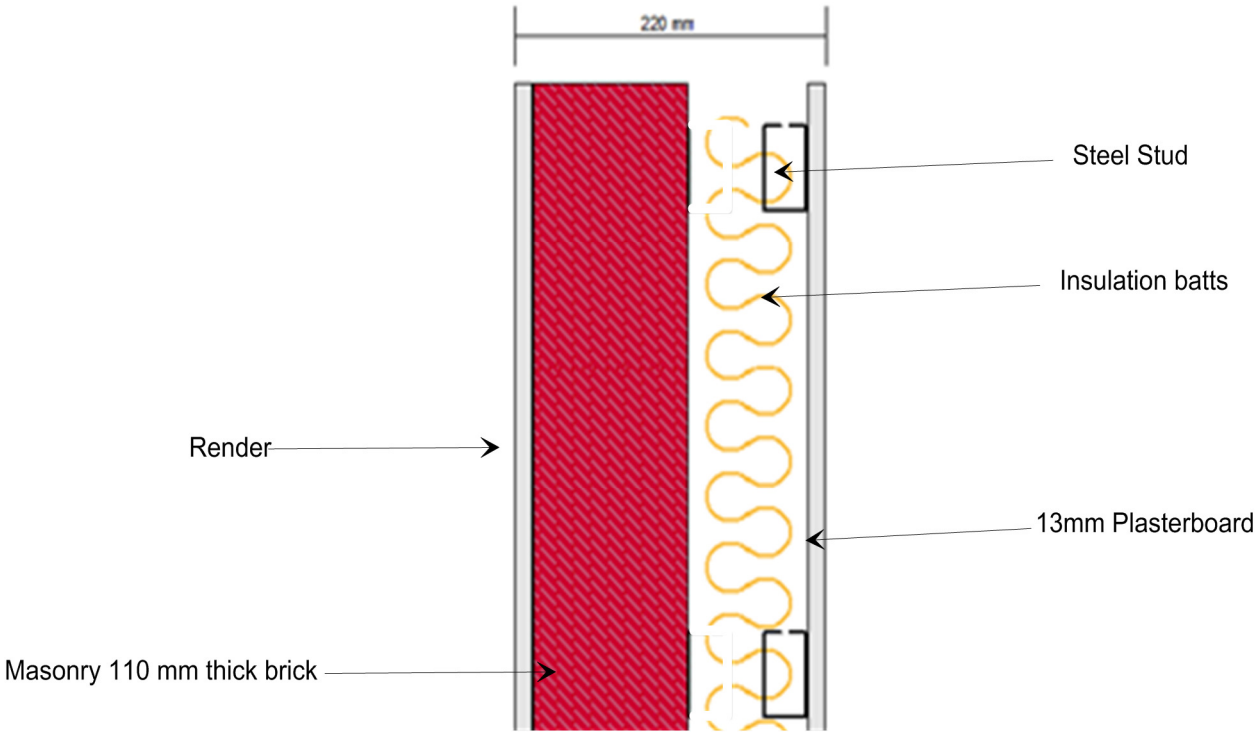
Insul Version 7.0 Predicted acoustic rating: 51 Rw+Ctr (Error ±3Rw)



Alternatively,

- one leave of 110mm thick solid masonry bricks with
- 64mm minimum width steel studs at 600mm centres,
- 20mm gap to achieve discontinuity
- cavity filled with 50 – 60 mm thick glasswool or polyester batts or the equivalent with minimum density 20 kg/m^3
- adjacent to a dry area,13 mm thick plasterboard screw fixed to the steel stud or adjacent to a a wet area, 6 mm thick fibre cement panels
- 13 mm thick plasterboard glue fixed to other side of the masonry wall. Air gaps between the two surfaces should be kept to a minimum. Alternatively, 13 mm render to the masonry side will provide better acoustic performance.

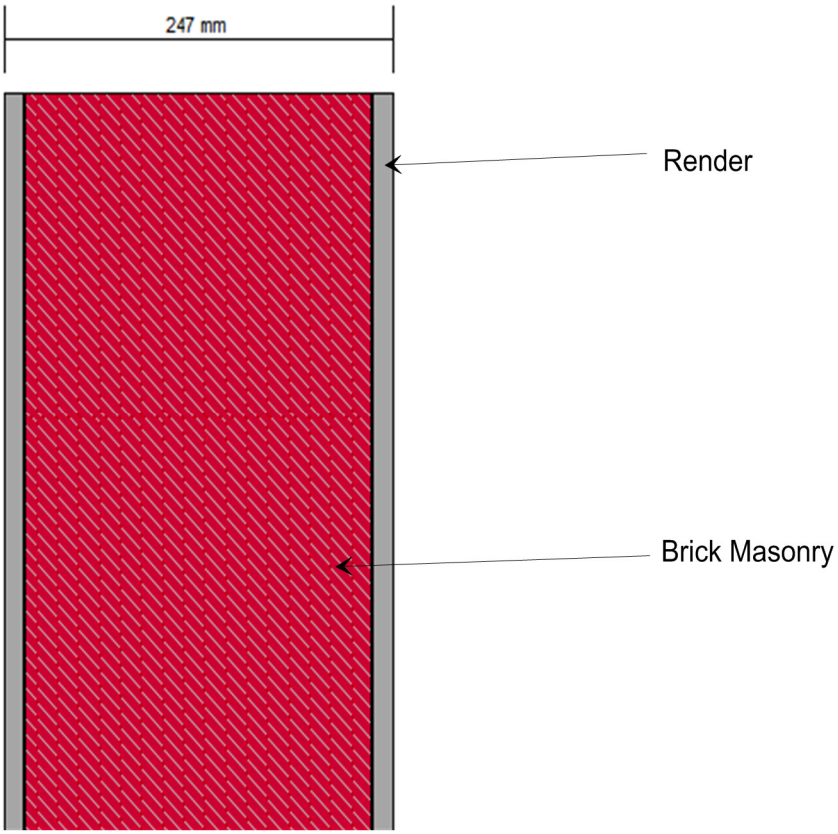
Insul Version 7.0 Predicted acoustic rating: 59 Rw+Ctr (Error ±3Rw)



A masonry wall system recommended for use to achieve:
Rw + Ctr 50
but not required that it is a discontinuous wall type is as follows:

- single leaf of 220 mm brick masonry with
- 13 mm thick render on each face.

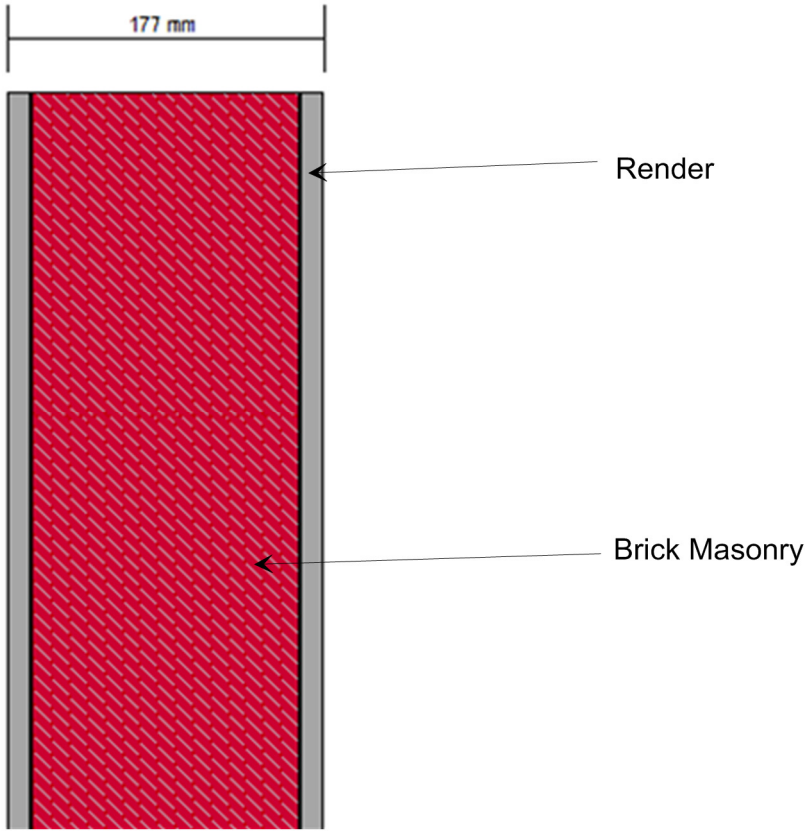
Insul Version 7.0 Predicted acoustic rating: 51 Rw+Ctr (Error ±3Rw)



A masonry wall system recommended for use to achieve:
Rw 50 is as follows:

- single leaf of 150 mm brick masonry with
- 13 mm thick render on each face

Insul Version 7.0 Predicted acoustic rating: 51 Rw (Error ±3Rw. Error expected to be much less)

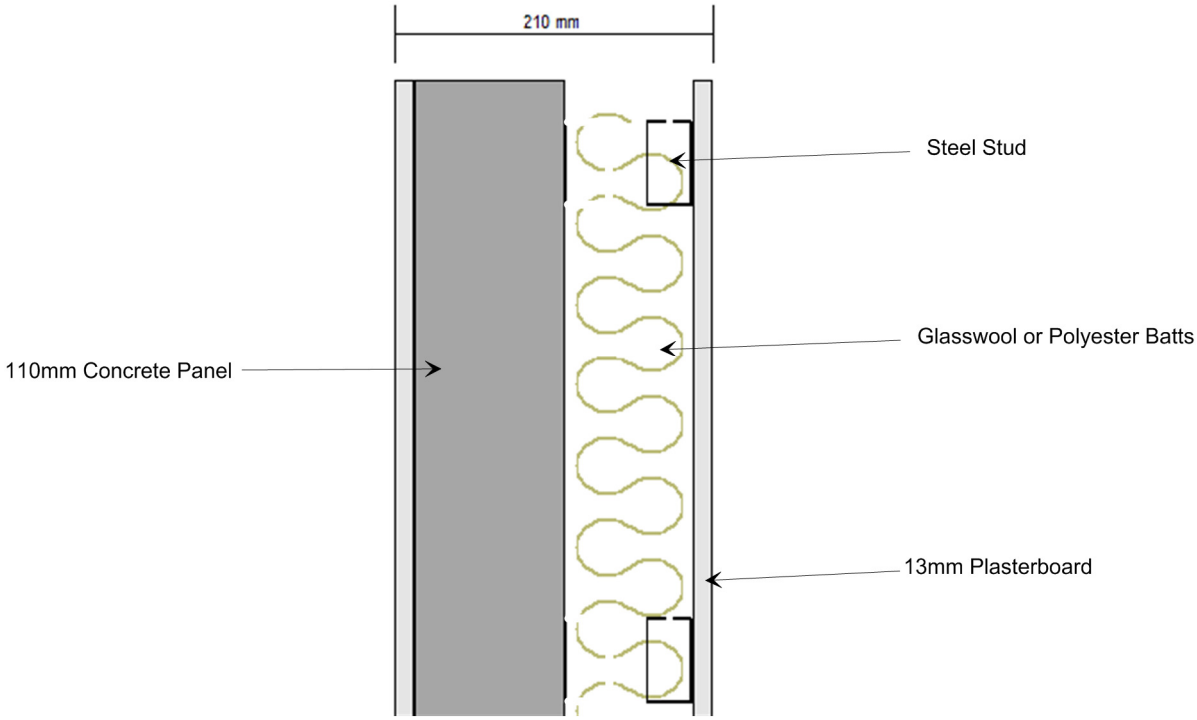


Concrete Walls:

Concrete wall systems recommended for use to achieve:
Rw + Ctr 50 and
be of a discontinuous wall type providing impact is as follows:

- 13 mm thick plasterboard daub fixed to
- 100 mm thick concrete panel
- 20mm cavity
- 64mm wide steel studs at 600mm centres
- cavity filled with 70mm thick glasswool or polyester batts or the equivalent
- 13 mm thick plasterboard screw fixed to the steel stud

Insul Version 7.0 Predicted acoustic rating: 63 Rw+Ctr (Error ±3Rw)



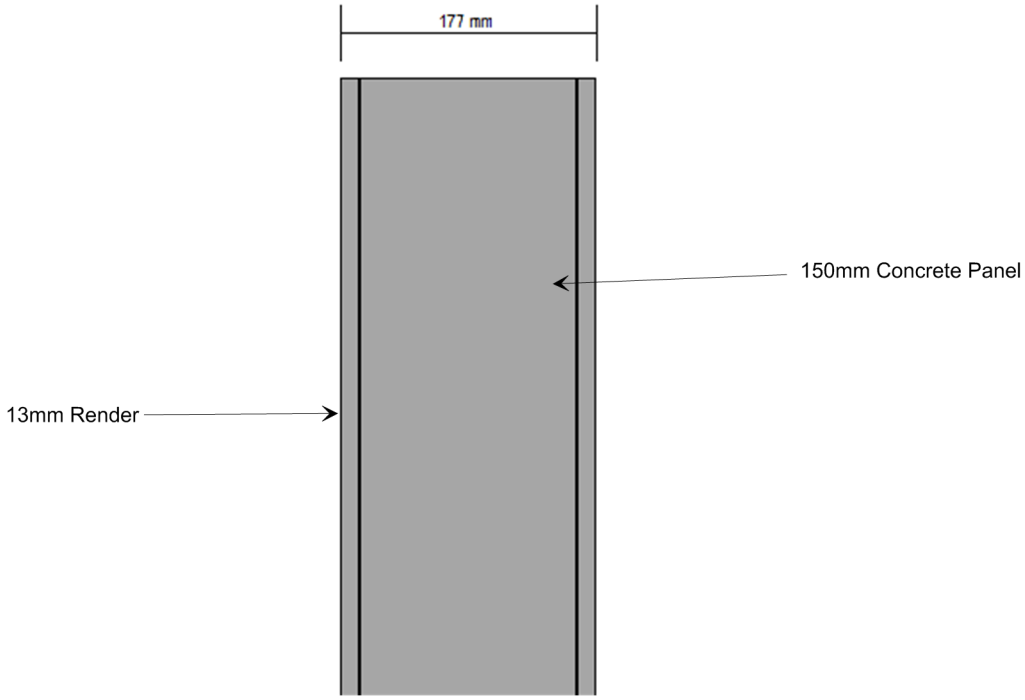
A wall system recommended for use to achieve:

Rw + Ctr 50

but <u>not</u> require that it is of a discontinuous wall type is as follows:

- 150 mm thick concrete panel with
- 13 mm thick render on each face. If plasterboard is used, gaps must be less than 2 mm.

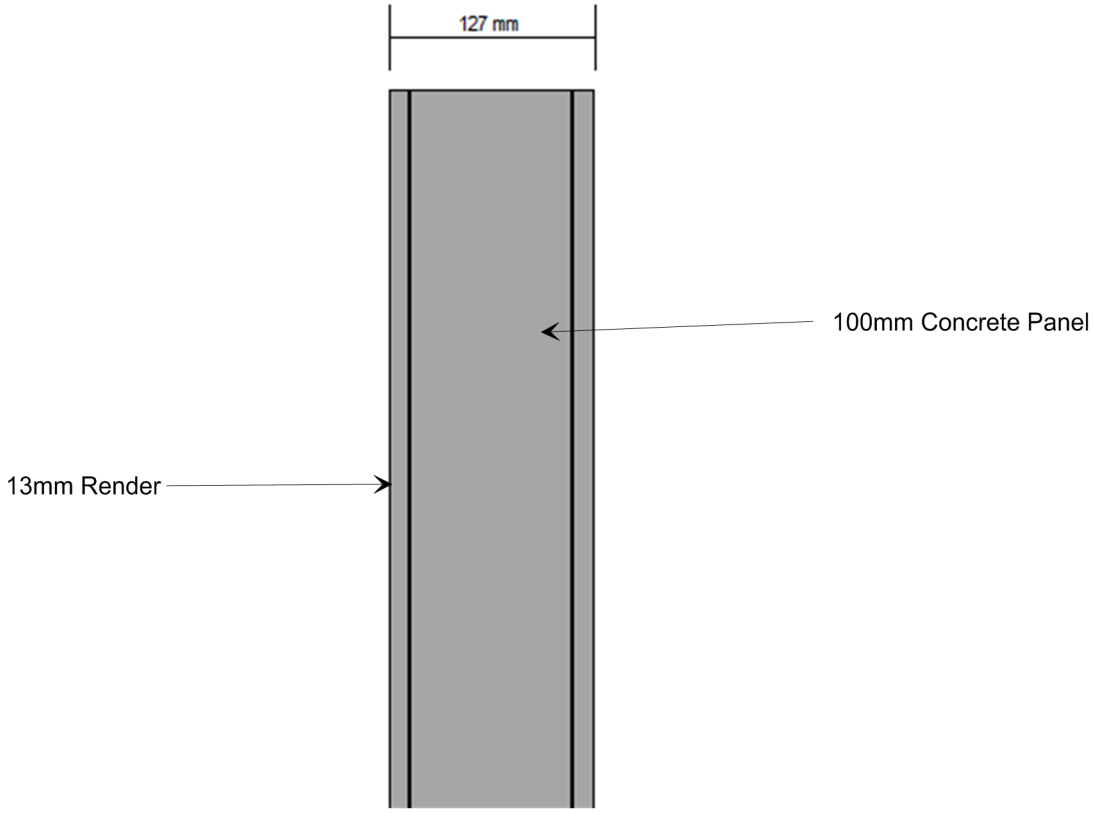
Insul Version 7.0 Predicted acoustic rating: 51 Rw+Ctr (Error ±3Rw. Error expected to be less)



A concrete wall system recommended for use to achieve:
Rw 50 is as follows:

- 100mm thick concrete panel with
- 13 mm thick render on each face. If plasterboard is used, gaps must be less than 2 mm.

Insul Version 7.0 Predicted acoustic rating: 51 Rw (Error ±3Rw Error expected to be less)

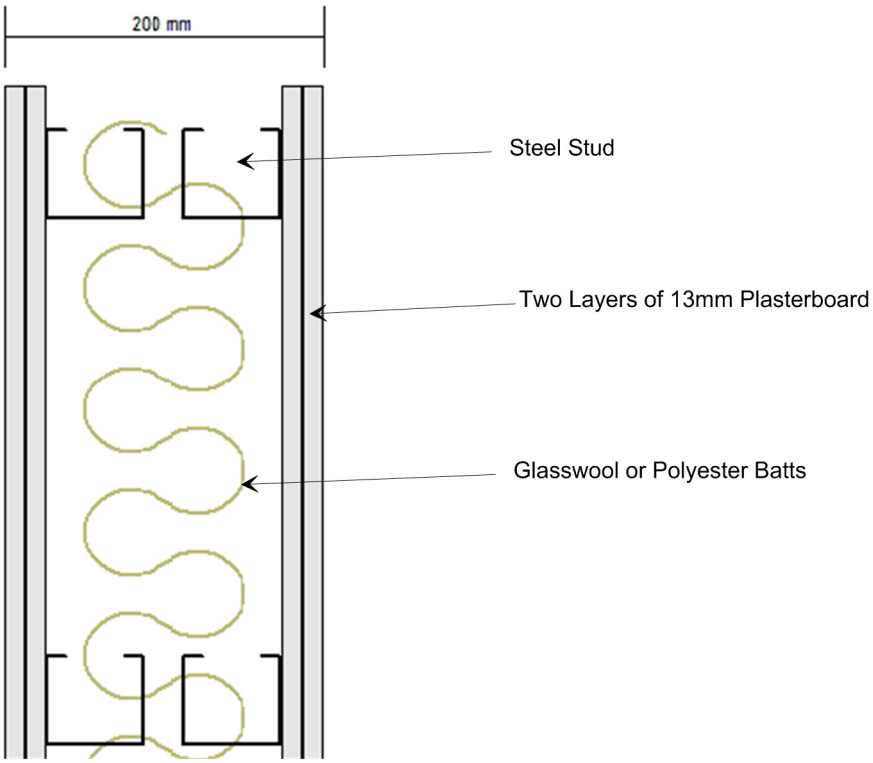


Light-Weight Walls:

Light-weight wall systems recommended for use to achieve:
Rw + Ctr 50 and
discontinuous wall type providing impact is as follows:

- Two layers of 13 mm thick plasterboard on each side of wall system
- 140 mm cavity between plasterboard sides on double steel studs separated 10 mm from each top and bottom rail
- Steel studs 64mm wide and 600mm centres
- 75mm thick 14 kg/m^3 glasswool or polyester batts or the equivalent in cavity

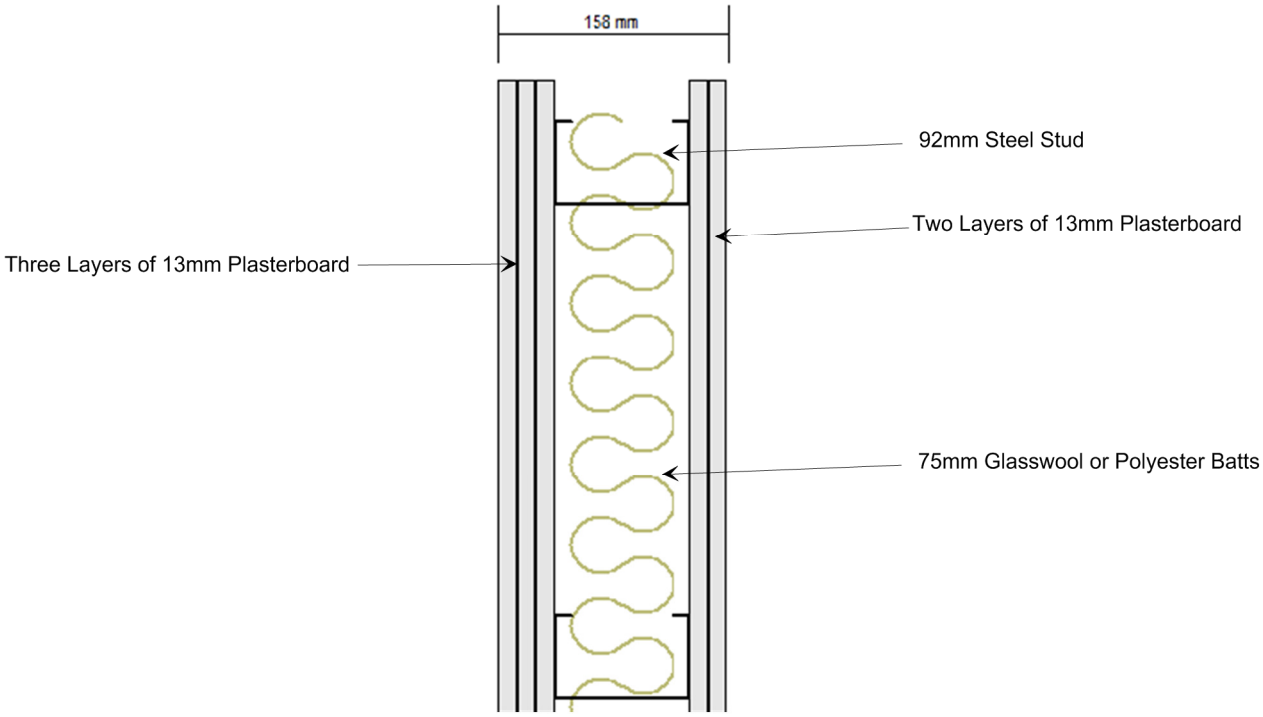
Insul Version 7.0 Predicted acoustic rating: 53 Rw+Ctr (Error ±3Rw)



A light weight wall system recommended for use to achieve:
Rw + Ctr 50
but <u>not</u> require that it is of a discontinuous wall type is as follows:

- Three layers of 13 mm thick plasterboard on one side of
- 92mm steel studs, 600mm centres
- 75mm thick 14 kg/m^3 glasswool or polyester batts or the equivalent in cavity
- Two layers of 13 mm thick plasterboard on the other side

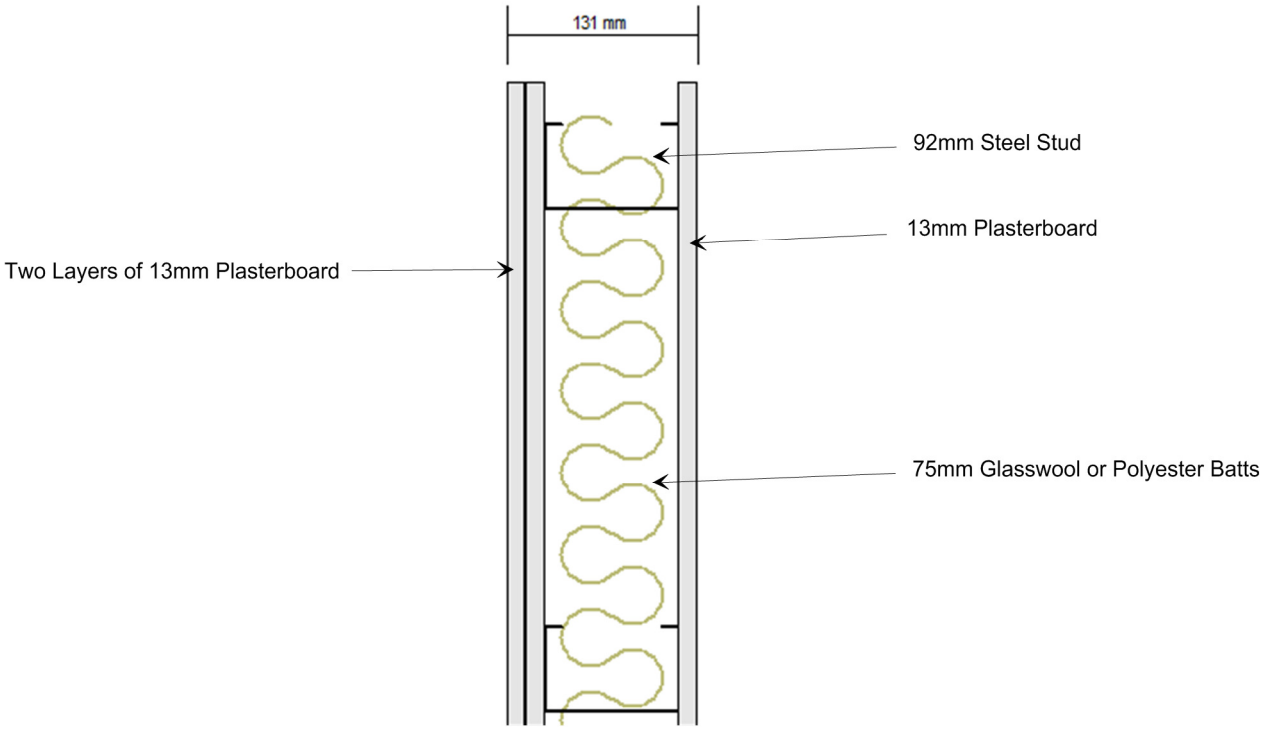
Insul Version 7.0 Predicted acoustic rating: 54 Rw+Ctr (Error ±3Rw)



A light-weight wall system recommended for use to achieve:
Rw 50 is as follows:

- Two layers of 13 mm thick plasterboard on one side of
- 92mm steel studs, 600mm centres
- 75mm thick 14 kg/m^3 glasswool or polyester batts or the equivalent in cavity
- one layer of 13 mm thick plasterboard on the other side

Insul Version 7.0 Predicted acoustic rating: 51 Rw (Error ±3Rw)



With **two** layers of plasterboard on both sides, the

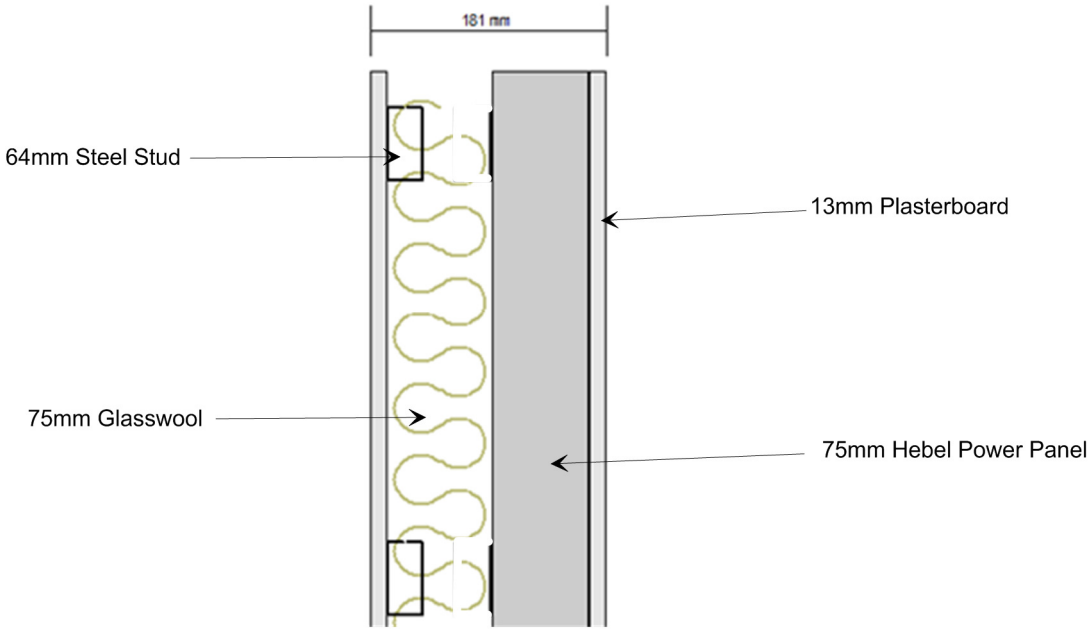
Insul Version 7.0 Predicted acoustic rating is: 55 Rw+Ctr (Error ±3Rw)

Hebel Walls

Light-weight Hebel wall system recommended for use to achieve:
Rw + Ctr 50 and
discontinuous wall type providing impact is as follows:

- One layer of 13 mm thick plasterboard on
- 64mm steel stud 600mm centres
- 75mm thick 14 kg/m^3 glasswool or polyester batts or the equivalent in cavity
- 75 mm Hebel Power Panel discontinuous from 1st steel stud system
- One layer of 13 mm thick plasterboard

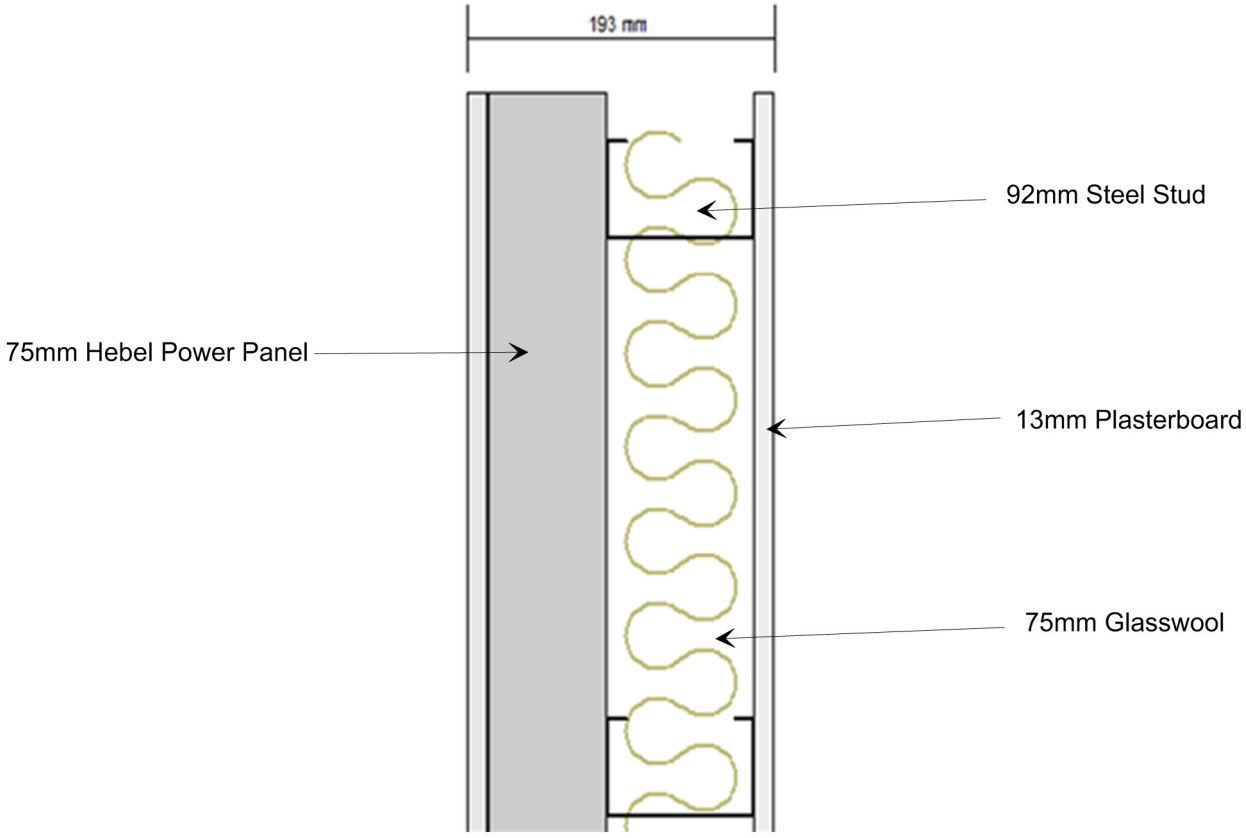
Insul Version 7.0 Predicted acoustic rating: 52 Rw+Ctr (Error ±3Rw)



Light-weight Hebel wall system recommended for use to achieve:
Rw + Ctr 50 and
But, not required to be of a discontinuous wall type:

- One layer of 13 mm thick plasterboard on
- 75 mm Hebel Power Panel
- 92mm steel stud 600mm centres
- 75mm thick 14 kg/m^3 glasswool or polyester batts or the equivalent in cavity
- One layer of 13 mm thick plasterboard

Insul Version 7.0 Predicted acoustic rating: 50 Rw+Ctr (Error ±3Rw)



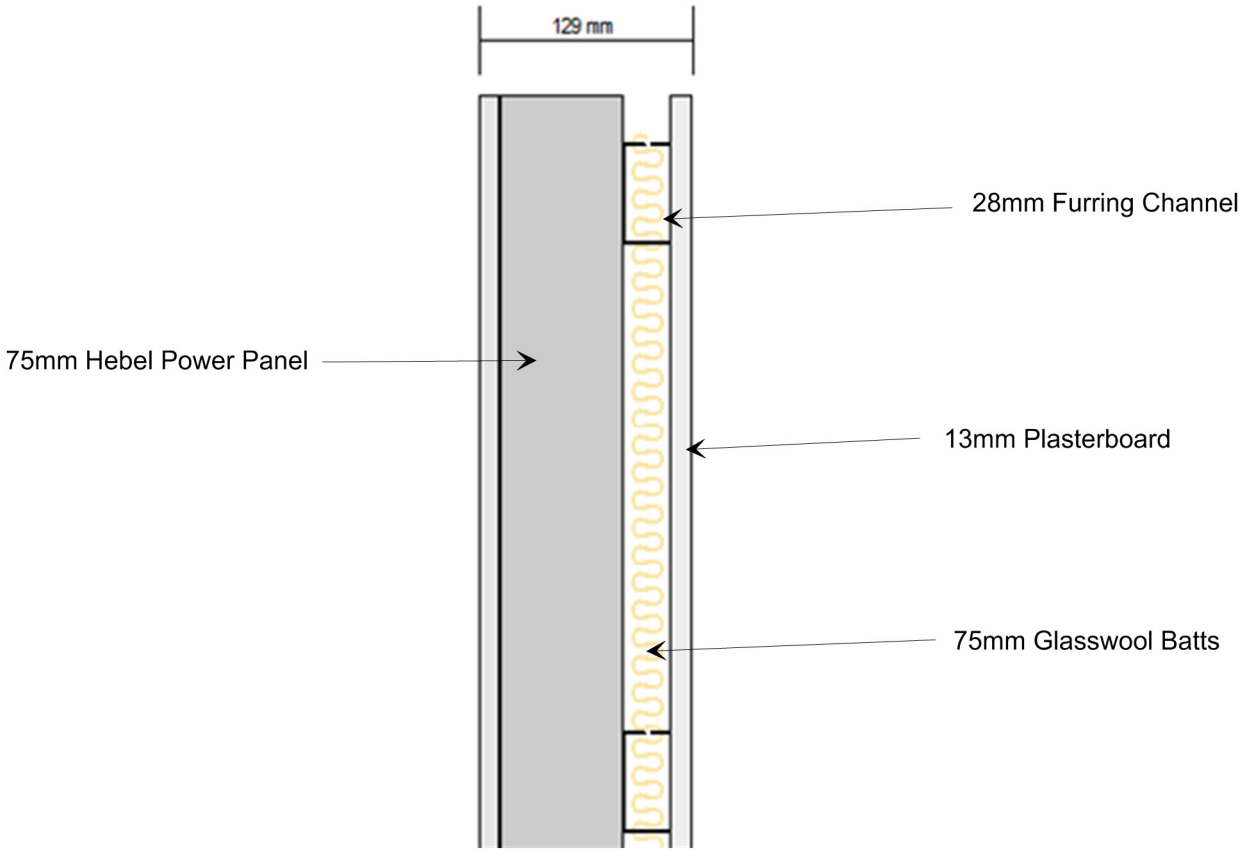
With **two** layers of plaster board after the glass wool filled cavity, the

Insul Version 7.0 Predicted acoustic rating is: 53 Rw+Ctr (Error ±3Rw)

A light-weight wall system recommended for use to achieve:
Rw 50 is as follows:

- One layer of 13 mm thick plasterboard on
- 75mm Hebel power panel
- 28mm furring channels, 600mm centres
- 25mm thick 24 kg/m^3 glasswool or polyester batts or the equivalent in cavity

Insul Version 7.0 Predicted acoustic rating: 51 Rw (Error ±3Rw)



With **two** layers of plaster board after the glass wool filled cavity, the

Insul Version 7.0 Predicted acoustic rating is: 55 Rw+Ctr (Error ±3Rw)

Where Hebel wall systems are to be used as infill walls between concrete columns, the following materials are recommended to….

Achieve Rw + Ctr ≥ 50

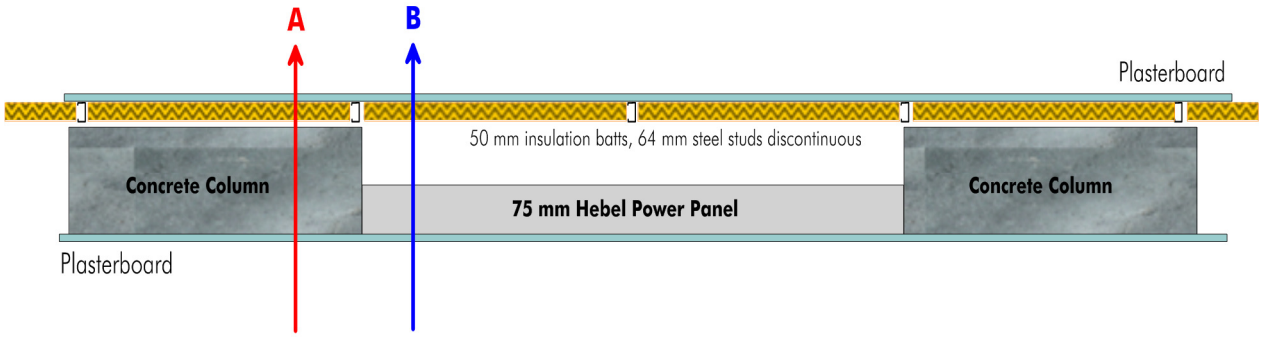
And be of a discontinuous wall type:

- 75 mm Hebel Power Panel sealed up against the concrete columns
- One layer of 13 mm thick daub fixed against the Hebel Power Panel and concrete columns
- 64mm steel stud 600mm centres discontinuous from the Hebel power panel and concrete columns, fixed to the slab above and below only
- 50mm thick 14 kg/m^3 glasswool or polyester batts or the equivalent in cavity
- One layer of 13 mm thick plasterboard screw fixed to the 92mm steel stud.

This wall system is made up of two separate partition paths. See diagram below.

Path A is through the plasterboard – insulation batts – 175mm concrete columns – plasterboard.
Insul Version 7.0 Predicted acoustic rating is: 64 Rw+Ctr (Error ±3Rw)

Path B is through the plasterboard – insulation batts – Hebel 75 Power Panel – plasterboard.
Insul Version 7.0 Predicted acoustic rating is: 57 Rw+Ctr (Error ±3Rw)

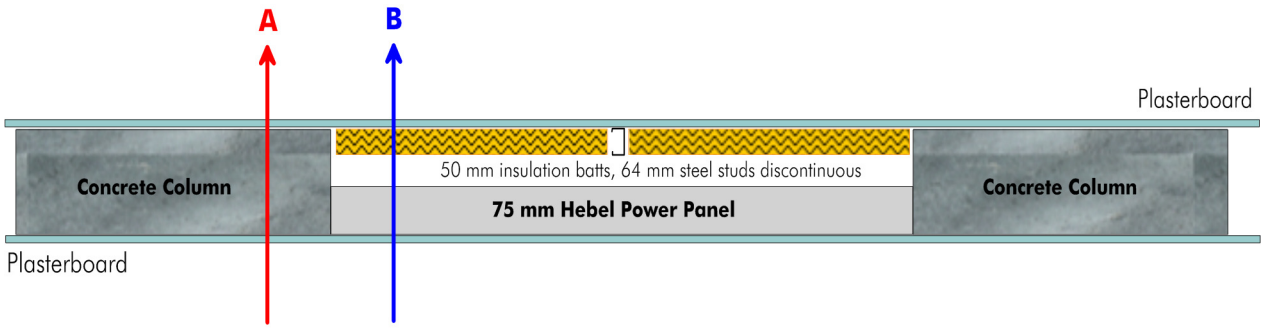


Achieve Rw + Ctr ≥ 50

And be of a continuous wall type:

- 75 mm Hebel Power Panel sealed up against the concrete columns
- One layer of 13 mm thick daub fixed against the Hebel Power Panel and concrete columns
- 64mm steel stud 600mm centres fixed to the inside of the concrete columns, to the slab above and below
- 50mm thick 14 kg/m^3 glasswool or polyester batts or the equivalent in cavity of steel stud
- One layer of 13 mm thick plasterboard screw fixed to the 64mm steel studs and other side of the concrete columns.

This wall system is made up of two separate partition paths. See diagram below.



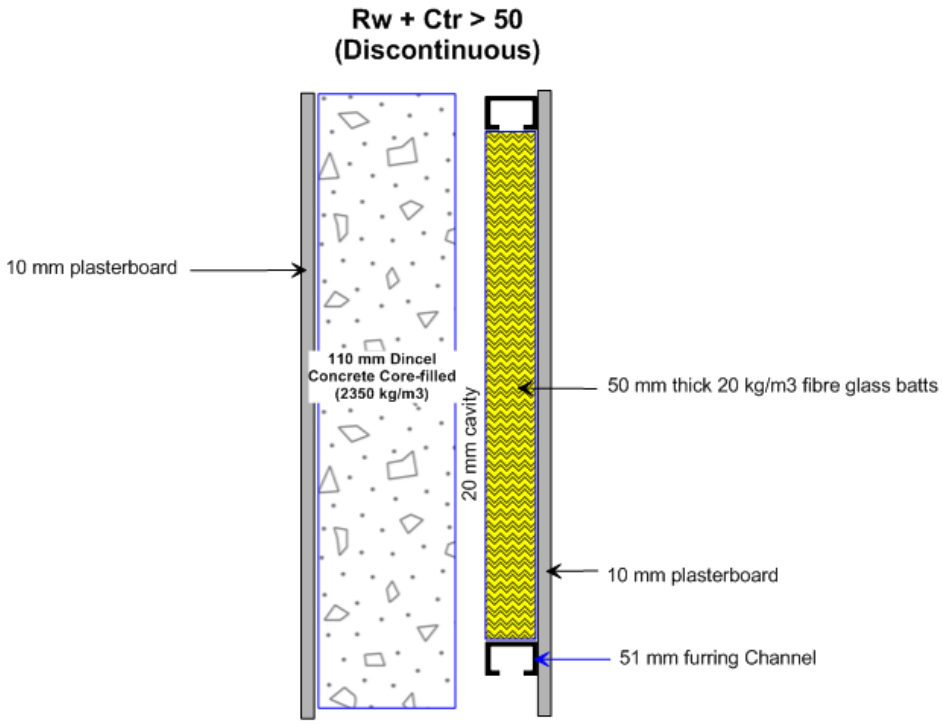
Path A is through the plasterboard – insulation batts – 175mm concrete columns – plasterboard.
Insul Version 7.0 Predicted acoustic rating is: 64 Rw+Ctr (Error ±3Rw)

Path B is through the plasterboard – insulation batts – Hebel 75 Power Panel – plasterboard.
Insul Version 7.0 Predicted acoustic rating is: 57 Rw+Ctr (Error ±3Rw)

Dincel Concrete Walls (110mm thick Dinzel-Wall)

Concrete wall systems recommended for use to achieve:
Rw + Ctr 50 and
discontinuous wall type providing impact is as follows:

- 110 mm Dinzel Wall, core filled with concrete density 2350kg/m^3
- 10 mm thick plasterboard daub fixed on one face of the 110mm Dinzel Wall,
- 9mm fibre cement sheeting or 13mm or 16mm standard or water resistant plasterboard screw fixed onto 51mm furring channels @ 600mm spacings,
- 20mm gap between the Dinzel-Wall and the above light weight partition
- 50mm thick insulation batts ~20kg/m^3.

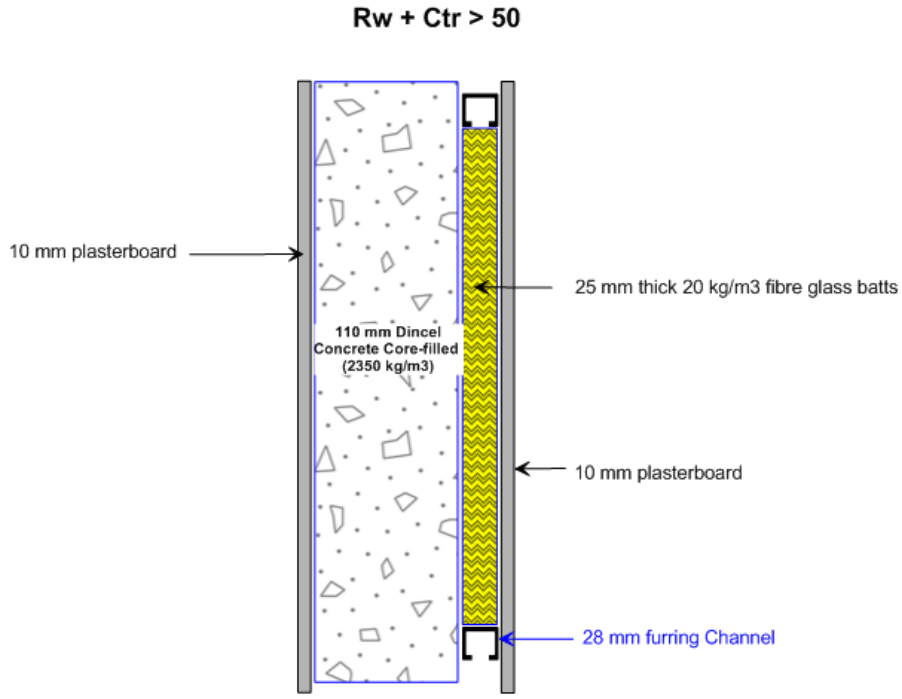


A wall system recommended for use to achieve:

Rw + Ctr 50

but not require that it is a discontinuous wall type is as follows:

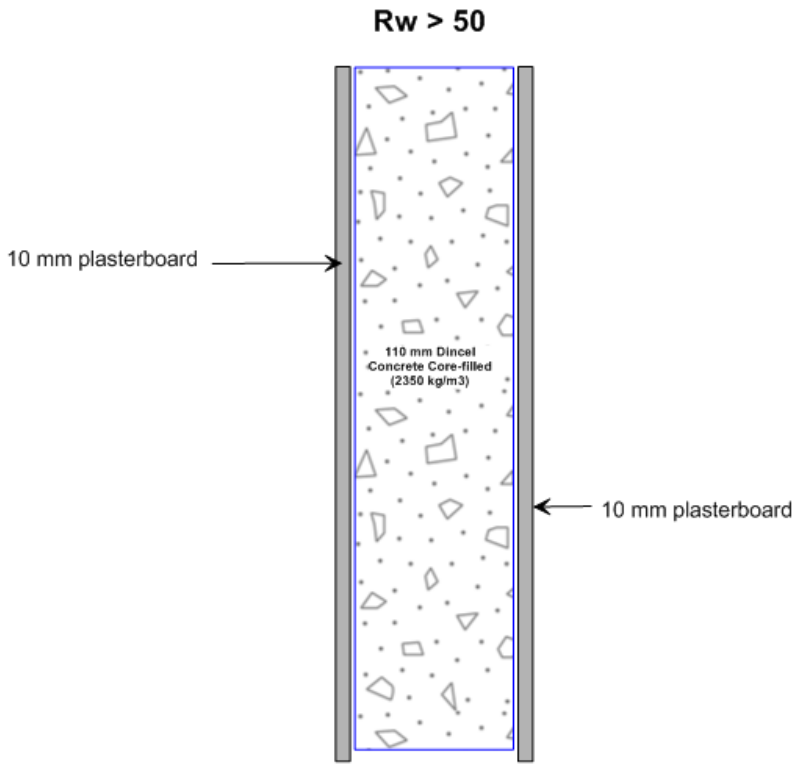
- 110 mm Dinzel Wall, core filled with concrete density 2350kg/m^3
- 10 mm thick plasterboard daub fixed on one face of the 110mm Dinzel Wall,
- 9mm fibre cement sheeting or 13mm or 16mm standard or water resistant plasterboard screw fixed onto 28 mm furring channels @ 600mm spacing and standard furring channel fixing clips @ 1200mm centres, and
- 25 mm thick insulation batts ~20kg/m^3.



The above wall systems have been certified by RSA Acoustics in a document entitled Acoustic certification of 110 mm Dinzel Wall dated 28th September 2009.

A concrete wall system recommended for use to achieve:
Rw 50 is as follows:

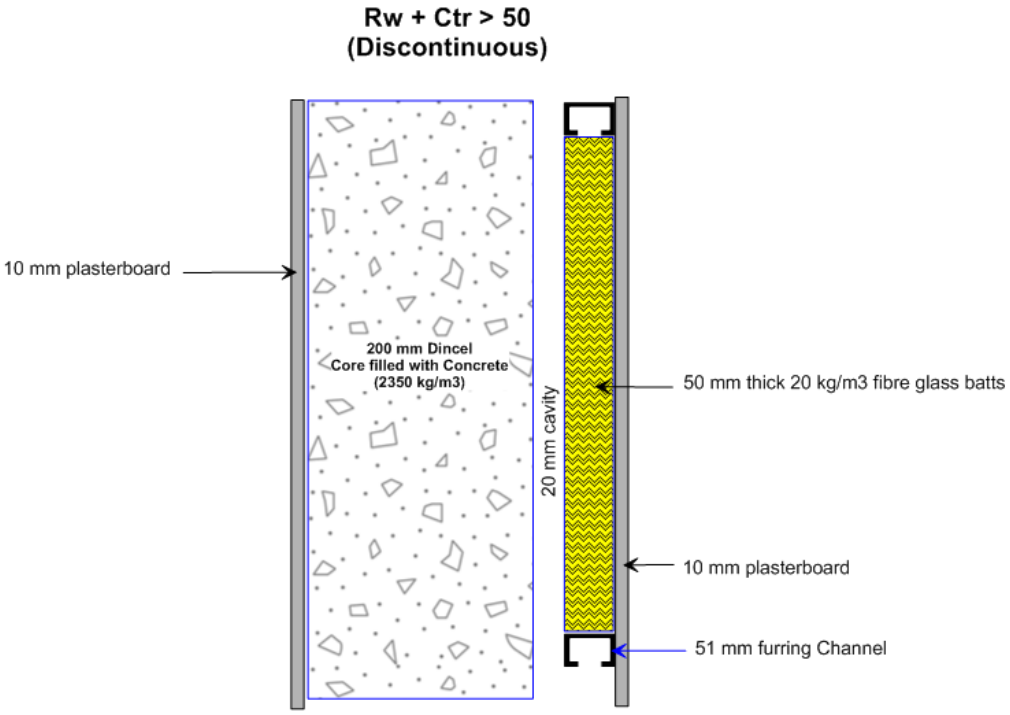
- 110mm Dinzel Wall, core filled with concrete density 2350kg/m^3
- 10mm thick plasterboard daub fixed on both faces of the 110mm Dinzel Wall



Dincel Concrete Walls (200mm Dincel-Wall)

Concrete wall systems recommended for use to achieve:
Rw + Ctr 50 and
discontinuous wall type providing impact is as follows:

- 200 mm Dinzel Wall, core filled with concrete density 2350kg/m^3
- 10 mm thick plasterboard daub fixed on one face of the 200mm Dinzel Wall,
- 6mm fibre cement sheeting or 10mm or 13mm standard or water resistant plasterboard screw fixed onto 51mm furring channels @ 600mm spacings,
- 20mm gap between the Dinzel-Wall and the above light weight partition
- 50mm thick insulation batts ~20kg/m^3.

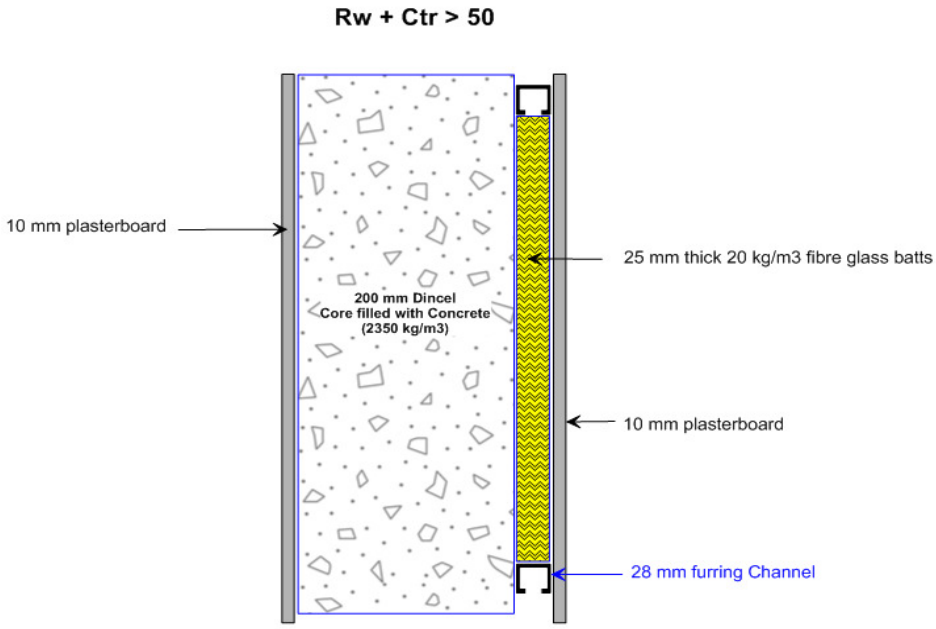


A wall system recommended for use to achieve:

Rw + Ctr 50

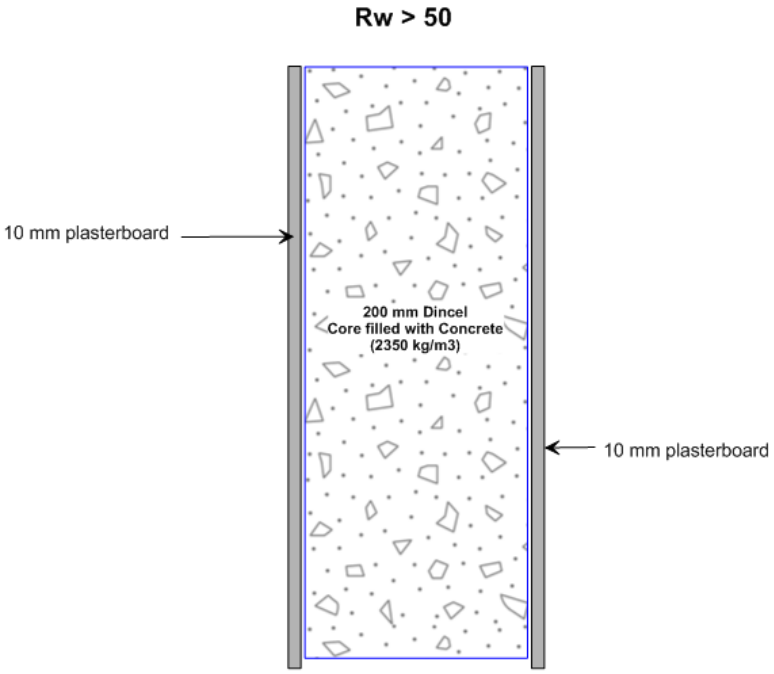
but not require that it is a discontinuous wall type is as follows:

- 200 mm Dinzel Wall, core filled with concrete density 2350kg/m^3
- 10 mm thick plasterboard daub fixed on one face of the 200mm Dinzel Wall,
- 6mm fibre cement sheeting or 10mm or 13mm standard or water resistant plasterboard screw fixed onto 28 mm furring channels @ 600mm spacing and standard furring channel fixing clips @ 1200mm centres, and
- 25 mm thick insulation batts ~20kg/m^3.



A concrete wall system recommended for use to achieve:
Rw 50 is as follows:

- 200mm Dinzel Wall, core filled with concrete density 2350kg/m^3
- 10mm thick plasterboard daub fixed on both faces of the 200mm Dinzel Wall



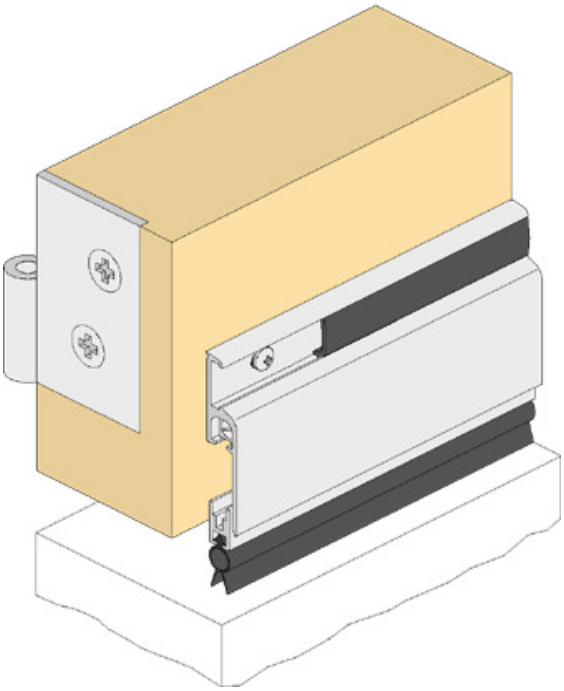
The above wall systems have been based on:

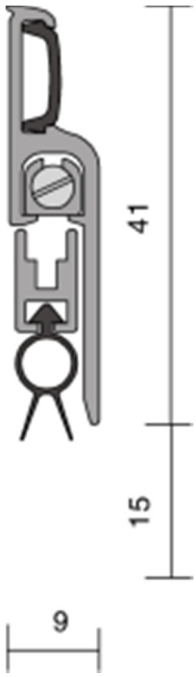
- The test results for 110 mm Dincel Wall certified by RSA Acoustics in a document entitled Acoustic certification of 110 mm Dinzel Wall dated 28th September 2009.
- The test results for 200 mm Dincel Wall certified by SLR Consulting Australia Pty Ltd.
- Software program called insul 7.0.

8.2 TIMBER ENTRY DOORS

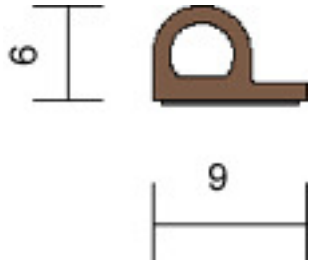
For timber doors incorporated into a partition separating a sole-occupancy unit from a common area, hallway or lobby area, that door is required to provide an Rw of not less than 30. A suitable door system for this purpose would be a 40mm solid core timber door with Raven type acoustic perimeter and drop seals.

Raven RP60 Threshold Seal





Raven type RP48 perimeter seals



8.3 SOIL AND WASTE PIPES

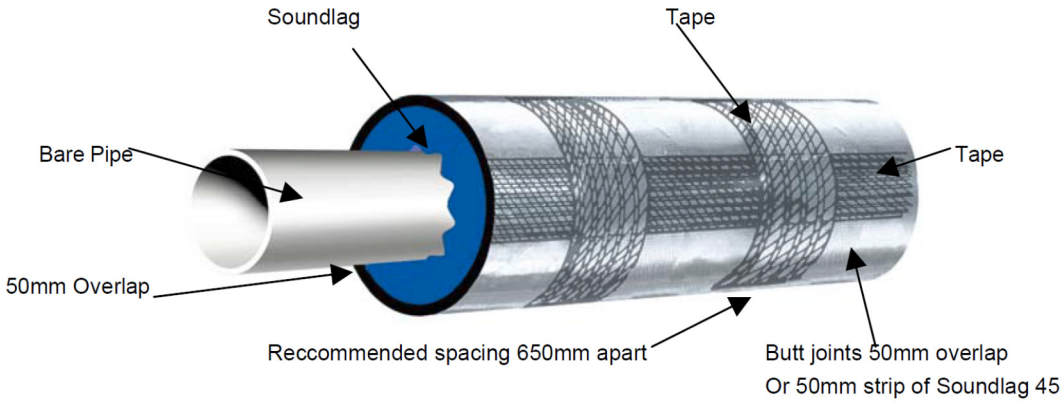
For services and/or waste pipes from one unit that pass through another unit the following noise control measures are recommended:

To achieve an Rw + Ctr not less than 25:

- Minimum of two (2) layers of 13 mm plasterboard are required to partition the services/ waste pipes from any non-habitable room (including the kitchen),

To achieve an Rw + Ctr not less than 40:

- Minimum of two (2) layers of 13 mm plasterboard are required as a partition for the services/waste pipes from a habitable room, and in addition the pipes are to be lagged with an acoustic lagging material such as Pyrotech's Soundlag 4525C or similar.



Further, an access door or panel must be firmly fixed so as to overlap the frame or rebate the frame by not less than 10 mm, and be fitted with a proper sealing gasket along all edges and constructed of:

- *wood, particle board or block board not less than 38 mm thick; or*
- *compressed fibre reinforced cement sheeting not less than 9 mm thick; or*
- *other suitable material with a mass per unit area not less than 24 kg/m^2.*

For the services shaft wall, the following will be satisfactory:

- 75 mm Hebel Powerpanel (HEB1204)
- 28 mm furring channel, (minimum 43 mm cavity) 50 mm glasswool insulation
- 13 mm Fyrchek.

8.4 CONCRETE SUB-FLOOR SYSTEMS

For concrete sub-floor systems the following floor systems have been found to achieve the nominated floor performance ratings in terms of impact sound isolation. Provided a minimum concrete thickness of 150mm, all systems shown below will achieve the desired airborne sound insulation performance.

	$L_{nT,w}+C_I$
• concrete sub base	80

- carpet on
  - carpet underlay over
  - concrete sub base 34
- carpet on carpet underlay
  - concrete sub base
  - standard mounted plasterboard 100 mm air-gap . . . 33
- carpet on carpet underlay over[1]
  - 3 mm thick 850 RG Acousta-Mat
  - concrete sub base 30
- 6 mm thick carpet tiles glued to[1]
  - 3 mm thick 850 RG Acousta-Mat
  - concrete sub base 47
- carpet on[4]
  - Damtec 3 mm 97361/3 or 5 mm 97362/3 TS rubber underlay
  - concrete sub base 50
- carpet on[4]
  - Damtec 2 mm KB-030107A TS rubber underlay
  - concrete sub base 49

- tiles over screed over
  - waterproof membrane over
  - Regupol "K225" cork/rubber, A1 Rubber "720D" cork/rubber or Damtec "Standard" cork/rubber underlays or the equivalent over
  - concrete sub base followed by
  - resilient clip or channel mounted plasterboard ceiling
  - 50 mm cavity . . . . . ≤62
- tiles
  - over 3 mm Acoustibond (over
  - 225 mm concrete sub base . . . . . ≤62
- tiles
  - over 3 mm Acoustibond over
  - 150 mm concrete sub base followed by
  - resilient clip or channel mounted plasterboard ceiling
  - 50 mm cavity . . . . . ≤62
- tiles over 25 mm gypsum concrete over
  - 6 mm thick 600 D Acousta-Mat
  - concrete sub base followed by
  - resilient clip/channel mounted plasterboard ceiling, 50 mm cavity . ≤62
- tiles glued to[2]
  - 20 mm thick screed over
  - 5 mm thick 700 D Acousta-Mat glued to
  - concrete sub base 59
- tiles over[3]
  - 3 mm thick 850 RG Acousta-Mat over
  - concrete sub base followed by
  - standard mounted plasterboard 250 mm air-gap and 75 mm insulation batts 54
- 9 mm ceramic tiles over[4]
  - Damtec 2 mm KB-080803a TS rubber underlay over
  - concrete sub base 56
- 9 mm ceramic tiles over[4]
  - Damtec 3 mm KB-010803b TS rubber underlay over
  - concrete sub base 57
- 9 mm ceramic tiles over[4]
  - Damtec 4 mm KB-010703c TS rubber underlay over
  - concrete sub base 58

timber (14 mm thick) tongue and groove over
- 3 mm thick closed cell foil top underlay over
- concrete sub base over followed by
- standard mounted plasterboard ceiling . . . . . ≤62

- timber floor over
  - 15 mm timber battons glue fixed to
  - Regupol rubber underlay pads
  - cavity filled with 25 mm thick fibreglass batts120 kg/m^3 over
  - concrete sub base followed by
  - standard mounted plasterboard ceiling . . . . . ≤62
- 8 or 14 mm timber floor over[1]
  - A1 Rubber "AcoustaMat" 3 mm thickness 850 kg/m3 density over
  - concrete sub base followed by 59
- 18 mm solid timber floor over[4]
  - Damtec 3 mm KB-220306D or 5 mm KB220306E rubber underlay over
  - concrete sub base 58
- 16 mm Parquetry block adhered to[4]
  - Damtec 2 mm KB-040107N rubber underlay over
  - concrete sub base 54
- 8 mm laminated timber floor over[4]
  - Damtec 2 mm KB-09-00-1 TS or 3 mm KB-09-00-2 TS rubber underlay over
  - concrete sub base 53
- 14 mm floating timber floor over[4]
  - Damtec 2 mm KB-030107D TS or 6 mm KB-030107I TS rubber underlay over
  - concrete sub base 58
- 14 mm floating timber floor over[4]
  - Damtec 3 mm KB-220306B or 5 mm KB-220306C rubber underlay over
  - concrete sub base 59

- Armstrong Cushion Vinyl over
  - concrete sub base followed by
  - standard mounted plasterboard ceiling . . . . . ≤62
- Armstrong Cushion Vinyl over
  - 5 mm masonite (hardboard) over
  - 5 mm thick Regupol K225 underlay over
  - concrete sub base followed by
  - standard mounted plasterboard ceiling . . . . . ≤62
- Armstrong 2 mm Armalon NG Sheet Vinyl[2]
  - Glue fixed using Maxbond 107 High Grab Vinyl and Sheet Vingyl adhesive to
  - Hardboard Austarlia 5.1 thickness Dual Bond Masonite over
  - A1 Rubber "AcoustaMat" 3 mm thickness 850 kg/m3 density over
  - concrete sub base followed by 54
- Minimum 3 mm thick Vinyl Plank/Sheet adhered with[1]
  - 3 mm thick 930 D Acousta-Mat Cork & Rubber glued to
  - concrete sub base followed by 57

The BCA has nominated 'Deemed to Satisfy' systems that will achieve the desired sound isolation ratings. A recommended 'Deemed to Satisfy' floor system consists of:

- Minimum 150mm concrete slab
- 28mm furring channels and isolation mounts fixed to underside of slab, at 600mm centres
- 65mm thick polyester insulation with a density of 8kg/m^3 positioned between furring channels
- One layer of plasterboard fixed to the furring channels.

The 'Deemed to Satisfy' system will comply irrespective of the floor covering over. Where rigid type floor coverings are proposed *(such as timber floor boards or tiles)* they are not to make contact with the walls or joinery (cupboards, kitchen bench etc.). Temporary spacers of approximately 5mm should be used during installation, and when removed, the gaps filled with silicone or similar non-rigid type mastic sealant.

1. Test results are provided in the A1 Rubber Product Guide. Contact Cheryl McOrrie on 0408 070 734 for test results.
2. Test results are provided in the A1 Rubber Product Guide and report prepared by CSIRO. Testings were conducted between 16th and 23rd June 2008. Contact Cheryl McOrrie on 0408 070 734 for test results.
3. Testing results are provided in the report prepared by Gabriels Environmental Design dated 19 July 2011 with report reference GED 11-047B. Contact Cheryl McOrrie on 0408 070 734 for test results.
4. Test results are provided in the Damtec brochures. Contact Costa Varsos on 0411 116 114 for test results.

It is the client's responsibility to obtain the test results or certificates from the manufacturer/supplier of

the underlay described above to ensure the acoustic performance of the described ceiling/floor systems have achieved the acoustic isolation requirements of the current BCA.

All of the above floor systems should not make contact with the walls. The gaps could be filled with silicone. The ratings provided are only indicative for the above described floor systems. These impact noise ratings can vary from one building construction to another building construction.

Alternative floor/ceiling systems could be considered provided that the acoustic performance is tested in accordance with the Specification F5.5 Impact Sound - Test of Equivalence or with relevant impact noise testing standards.

Important to note is that these recommendations also need to be considered for outdoor balconies that extend over indoor areas below.

9.0 SUMMARY AND CONCLUSION

Koikas Acoustics was requested to provide an acoustic report for the development site at No. 141 Waldron Road, Chester Hill, which included the following:

Road Traffic Noise Impact Assessment:

- Unattended noise surveys were conducted by Koikas Acoustics to determine the existing ambient noise levels. The data was used to determine the existing traffic noise emanating from Waldron Road and Bankstown Rail Corridor.
- Vibration levels that are just perceptible to the palm of the hand when placed on the ground are approximately 2 mm/s (velocity). Measurements of vibration levels could not be taken because they were less than 2 mm/s. Over extended periods of no rail activities the dose levels were insignificant.
- Rail and road traffic noise survey results were used to calculate the sound power levels for use with the calculation software model. The calculated noise levels to the periphery of the proposed buildings were used to undertake further noise intrusion calculations to the new habitable spaces of the proposed residential development. These calculations were undertaken to determine the type and extent of building materials required to provide satisfactory noise attenuation and achieve the indoor noise criterion level. The recommended acoustic building materials is provided in Section 6.0 of this report.
- Installation of a mechanical ventilation system is required to rooms fronting Waldron Road of the development. Refer to **Appendix E** and **Appendix F** for details. It is noted, alternative ventilation can be considered. Where ducted air conditioning is proposed, a fresh air duct connecting to the return–air duct can be used. Fresh air duct work must be lined with 50 mm thick rigid grade (32 kg/m^3) inside of the duct work for at least 4 metres.

Acoustic Privacy Between Units

- The recommendations on airborne and impact sound isolation between units through common partition elements such as walls, floors and services/waste pipes have been considered and provided in Section 7.0 of this report.

Based on the acoustic recommendations provided in this report being implemented in the building design, Koikas Acoustics certifies that the proposed residential development at No. 141 Waldron Road, Chester Hill will satisfy the nominated road traffic and BCA/Bankstown City Council DCP 2005 requirements in relation to acoustic privacy. Koikas Acoustics supports this development.

APPENDIX A

APPENDIX A

APPENDIX A

AERIAL VIEW

JOB NUMBER: 2727
CLIENT: Athena Hatgivlastis
SITE ADDRESS: 141 Waldron Road, Chester Hill

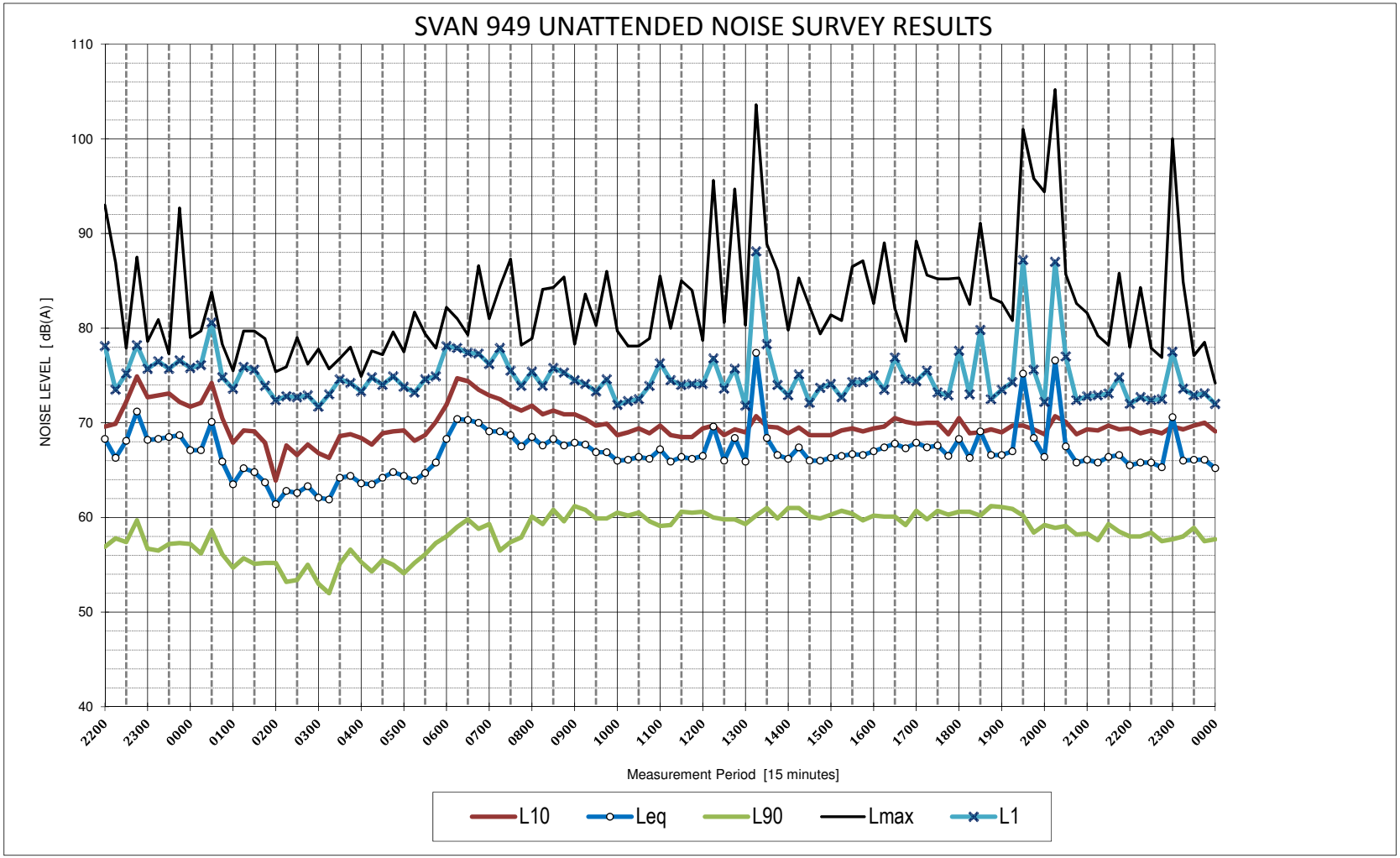
N
W E
S

APPENDIX B

APPENDIX B

APPENDIX B

DAY 1 **LOGGER LOCATION:** 141 Waldron Road, Chester Hill **DATE:** Saturday, 11 April 2015



AMBIENT NOISE METRICS

Descriptor	Period	Level	Units
L90 Daytime	0700-1800	55	dB(A)
L90 Evening	1800-2200	60	dB(A)
L90 Nighttime	2200-0700	55	dB(A)
Leq Daytime	0700-1800	68	dB(A)
Leq Evening	1800-2200	70	dB(A)
Leq Nighttime	2200-0700	67	dB(A)

TRAFFIC & MISC. NOISE METRICS

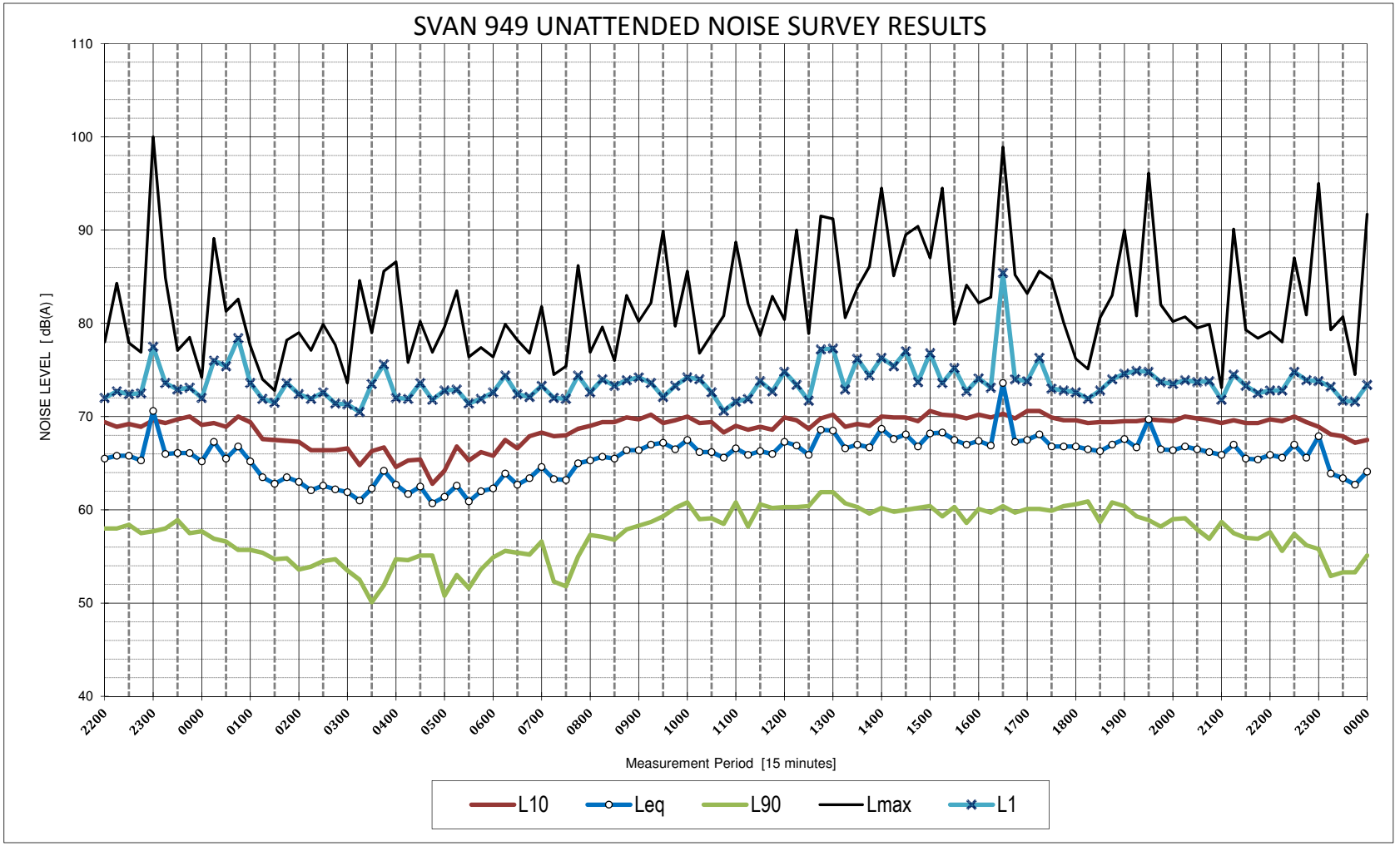
Leq 15 hours	0700-2200	69	dB(A)
Leq 9 hours	2200-0700	67	dB(A)
Leq 24 hours	0000-2400	68	dB(A)
L10 18 hours	0600-2400	70	dB(A)
max Leq 1 hour	0700-2200	72	dB(A)
max Leq 1 hour	2200-0700	69	dB(A)

Maximum noise events as defined in the Envirnmental Noise Management Manual [Lmax - Leq ≥ 15]	1

Note: This day has been removed from calculations as it was affected by rain.

		Frequency [Hz]									
Descritpor	**Period**	**31.5**	**63**	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**Total A**
10% min L90 Daytime	0700-1800	17	30	39	47	50	49	43	39	34	55
10% min L90 Evening	1800-2200	24	36	43	50	53	55	53	47	39	60
10% min L90 Night	2200-0700	18	31	40	48	51	50	44	41	36	55
10% min L90 Period	0000-0700	18	31	40	48	51	50	44	41	36	55
10% min L90 Period	0700-0000	17	30	40	48	51	49	44	40	35	55
Leq 15 hours	0700-2200	33	47	53	56	60	65	62	58	53	69
Leq 9 hours	2200-0700	27	42	49	54	56	60	61	60	57	67

DAY 2 **LOGGER LOCATION:** 141 Waldron Road, Chester Hill **DATE:** Sunday, 12 April 2015



AMBIENT NOISE METRICS

Descriptor	Period	Level	Units
L90 Daytime	0800-1800	52	dB(A)
L90 Evening	1800-2200	59	dB(A)
L90 Nighttime	2200-0800	54	dB(A)
Leq Daytime	0800-1800	67	dB(A)
Leq Evening	1800-2200	67	dB(A)
Leq Nighttime	2200-0800	64	dB(A)

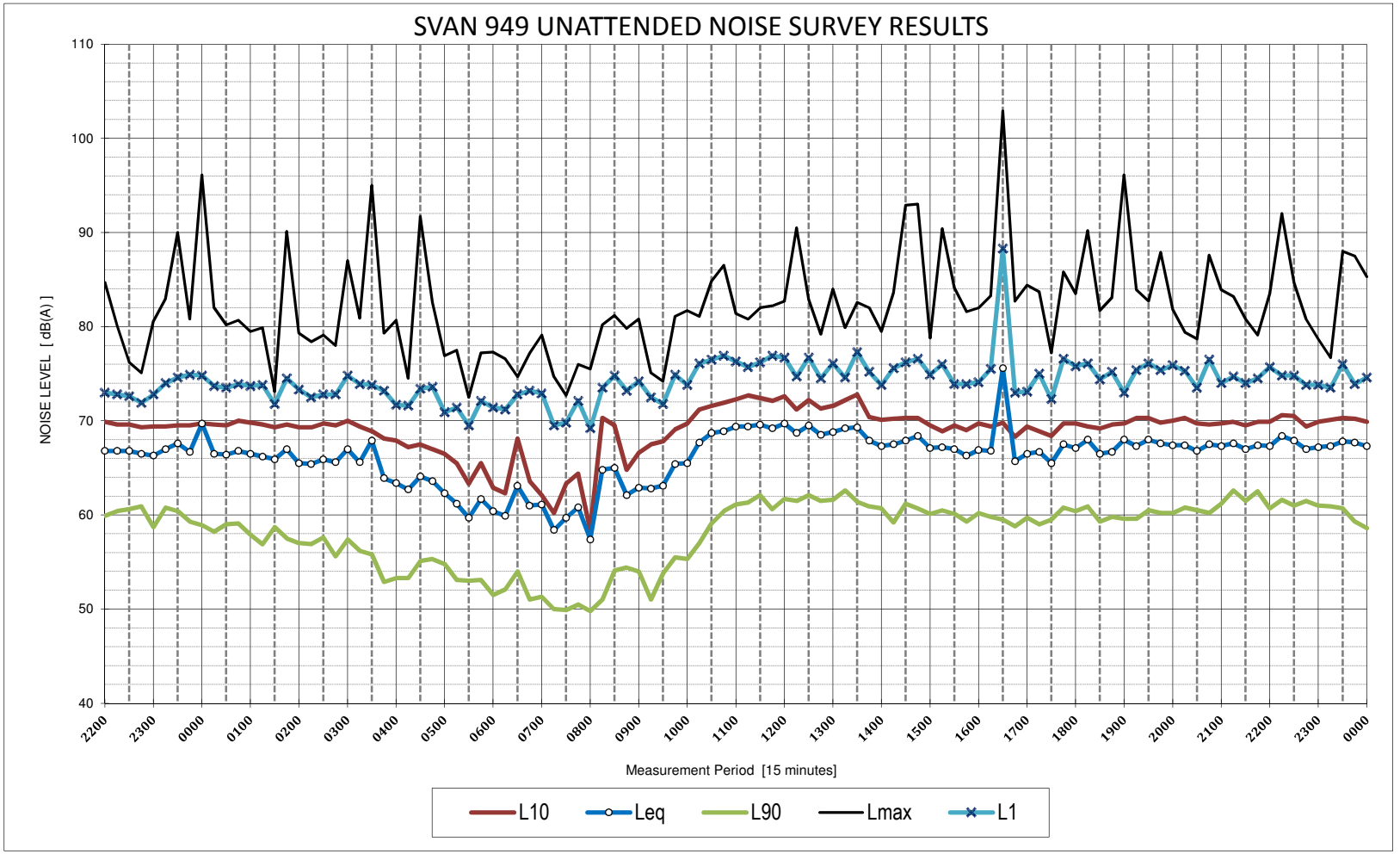
TRAFFIC & MISC. NOISE METRICS

Leq 15 hours	0700-2200	67	dB(A)
Leq 9 hours	2200-0700	64	dB(A)
Leq 24 hours	0000-2400	66	dB(A)
L10 18 hours	0600-2400	68	dB(A)
max Leq 1 hour	0700-2200	68	dB(A)
max Leq 1 hour	2200-0700	67	dB(A)

Maximum noise events as defined in the Envirnmental Noise Management Manual [Lmax - Leq ≥ 15]	0

		Frequency [Hz]									
Descritpor	**Period**	**31.5**	**63**	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**Total A**
10% min L90 Daytime	0700-1800	17	29	38	45	47	46	42	35	29	52
10% min L90 Evening	1800-2200	23	34	42	49	53	55	53	47	39	59
10% min L90 Night	2200-0700	17	30	39	47	50	49	44	38	32	54
10% min L90 Period	0000-0700	18	30	40	47	50	50	44	39	33	55
10% min L90 Period	0700-0000	17	30	38	46	48	47	42	36	30	53
Leq 15 hours	0700-2200	32	46	53	55	59	63	61	55	50	67
Leq 9 hours	2200-0700	27	42	49	54	57	60	58	52	46	64

DAY 3 **LOGGER LOCATION:** 141 Waldron Road, Chester Hill **DATE:** Monday, 13 April 2015



AMBIENT NOISE METRICS

Descriptor	Period	Level	Units
L90 Daytime	0700-1800	51	dB(A)
L90 Evening	1800-2200	60	dB(A)
L90 Nighttime	2200-0700	53	dB(A)
Leq Daytime	0700-1800	68	dB(A)
Leq Evening	1800-2200	67	dB(A)
Leq Nighttime	2200-0700	65	dB(A)

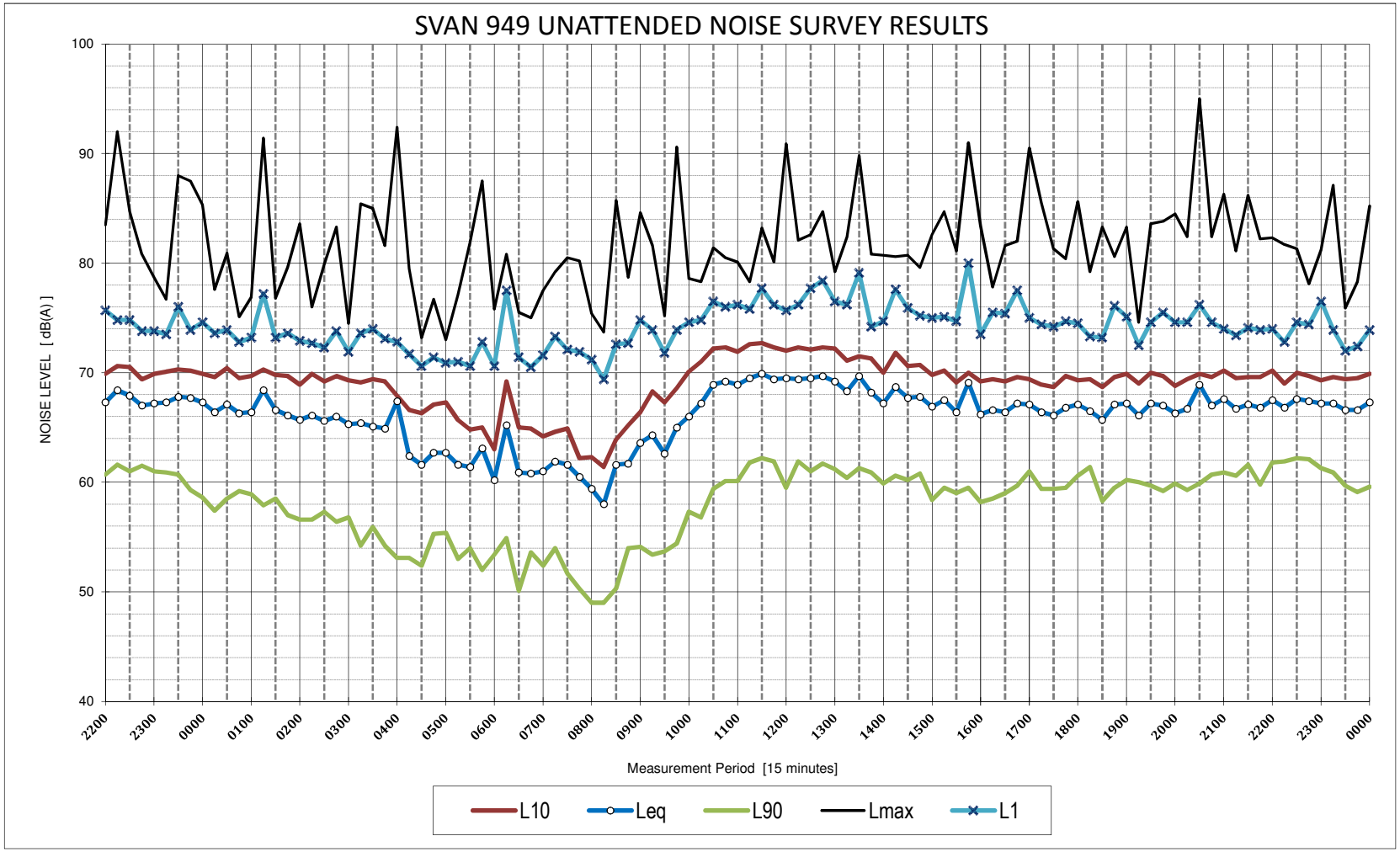
TRAFFIC & MISC. NOISE METRICS

Leq 15 hours	0700-2200	68	dB(A)
Leq 9 hours	2200-0700	65	dB(A)
Leq 24 hours	0000-2400	67	dB(A)
L10 18 hours	0600-2400	69	dB(A)
max Leq 1 hour	0700-2200	69	dB(A)
max Leq 1 hour	2200-0700	67	dB(A)

Maximum noise events as defined in the Envirnmental Noise Management Manual [Lmax - Leq ≥ 15]	0

		Frequency [Hz]									
Descritpor	**Period**	**31.5**	**63**	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**Total A**
10% min L90 Daytime	0700-1800	17	28	36	44	47	46	39	34	30	51
10% min L90 Evening	1800-2200	25	36	43	50	53	55	53	47	39	60
10% min L90 Night	2200-0700	17	30	38	46	48	48	42	36	31	53
10% min L90 Period	0000-0700	17	29	38	46	48	48	42	36	31	53
10% min L90 Period	0700-0000	17	30	38	45	48	48	42	37	32	53
Leq 15 hours	0700-2200	33	47	53	56	59	64	62	56	51	68
Leq 9 hours	2200-0700	28	43	49	54	56	61	59	53	48	65

DAY 4 **LOGGER LOCATION:** 141 Waldron Road, Chester Hill **DATE:** Tuesday, 14 April 2015



AMBIENT NOISE METRICS

Descriptor	Period	Level	Units
L90 Daytime	0700-1800	52	dB(A)
L90 Evening	1800-2200	59	dB(A)
L90 Nighttime	2200-0700	53	dB(A)
Leq Daytime	0700-1800	68	dB(A)
Leq Evening	1800-2200	67	dB(A)
Leq Nighttime	2200-0700	65	dB(A)

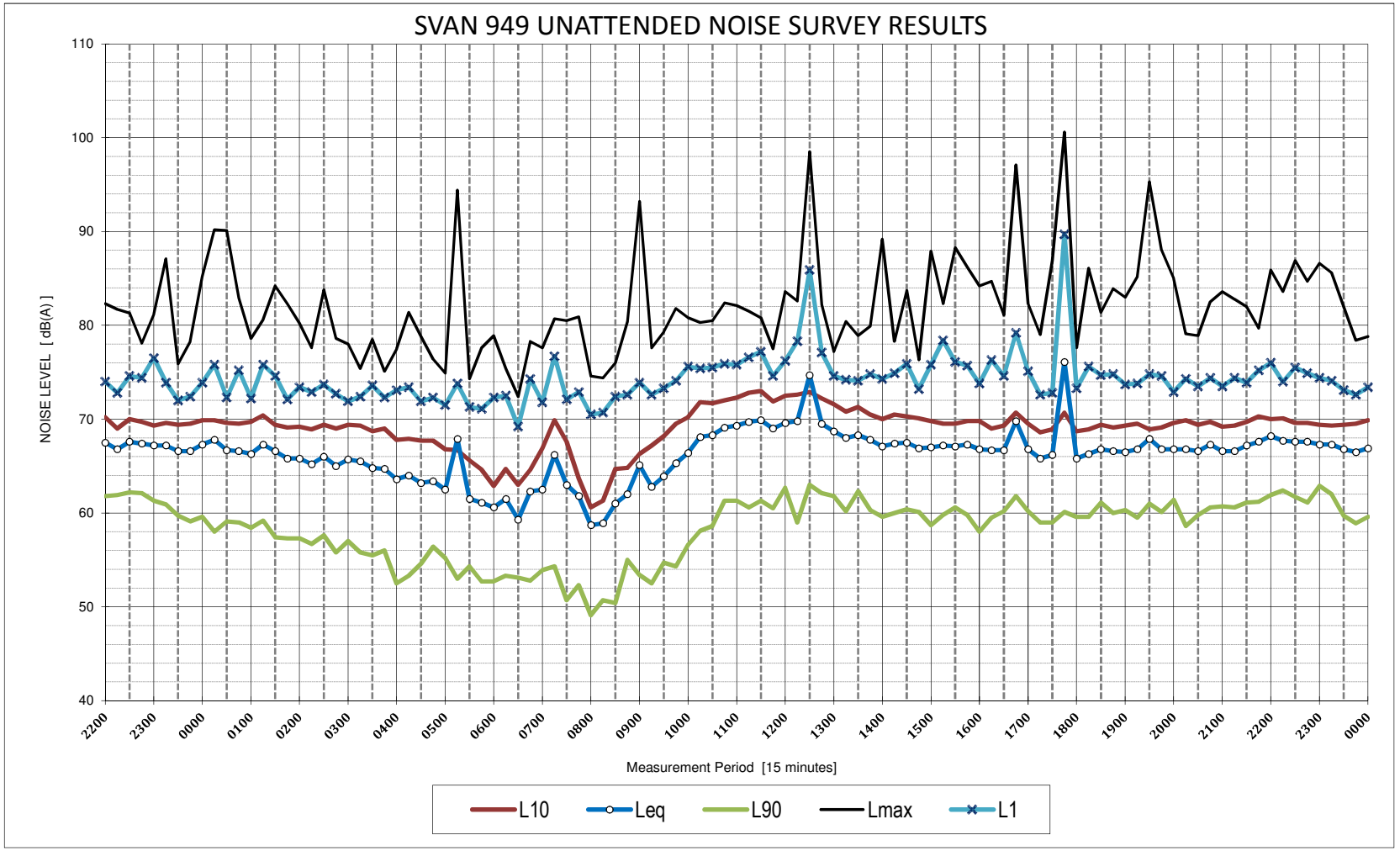
TRAFFIC & MISC. NOISE METRICS

Leq 15 hours	0700-2200	67	dB(A)
Leq 9 hours	2200-0700	65	dB(A)
Leq 24 hours	0000-2400	67	dB(A)
L10 18 hours	0600-2400	69	dB(A)
max Leq 1 hour	0700-2200	69	dB(A)
max Leq 1 hour	2200-0700	66	dB(A)

Maximum noise events as defined in the Envirnmental Noise Management Manual [Lmax - Leq ≥ 15]	0

		Frequency [Hz]									
Descritpor	**Period**	**31.5**	**63**	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**Total A**
10% min L90 Daytime	0700-1800	17	29	37	45	47	47	40	35	31	52
10% min L90 Evening	1800-2200	26	37	43	49	53	55	53	47	40	59
10% min L90 Night	2200-0700	17	30	39	46	48	48	42	36	32	53
10% min L90 Period	0000-0700	17	30	38	46	48	48	42	36	31	53
10% min L90 Period	0700-0000	17	30	39	46	49	49	43	37	32	54
Leq 15 hours	0700-2200	34	47	53	56	59	63	62	56	51	67
Leq 9 hours	2200-0700	28	42	49	53	56	61	59	53	47	65

DAY 5 **LOGGER LOCATION:** 141 Waldron Road, Chester Hill **DATE:** Wednesday, 15 April 2015



AMBIENT NOISE METRICS

Descriptor	Period	Level	Units
L90 Daytime	0700-1800	52	dB(A)
L90 Evening	1800-2200	60	dB(A)
L90 Nighttime	2200-0700	53	dB(A)
Leq Daytime	0700-1800	68	dB(A)
Leq Evening	1800-2200	69	dB(A)
Leq Nighttime	2200-0700	65	dB(A)

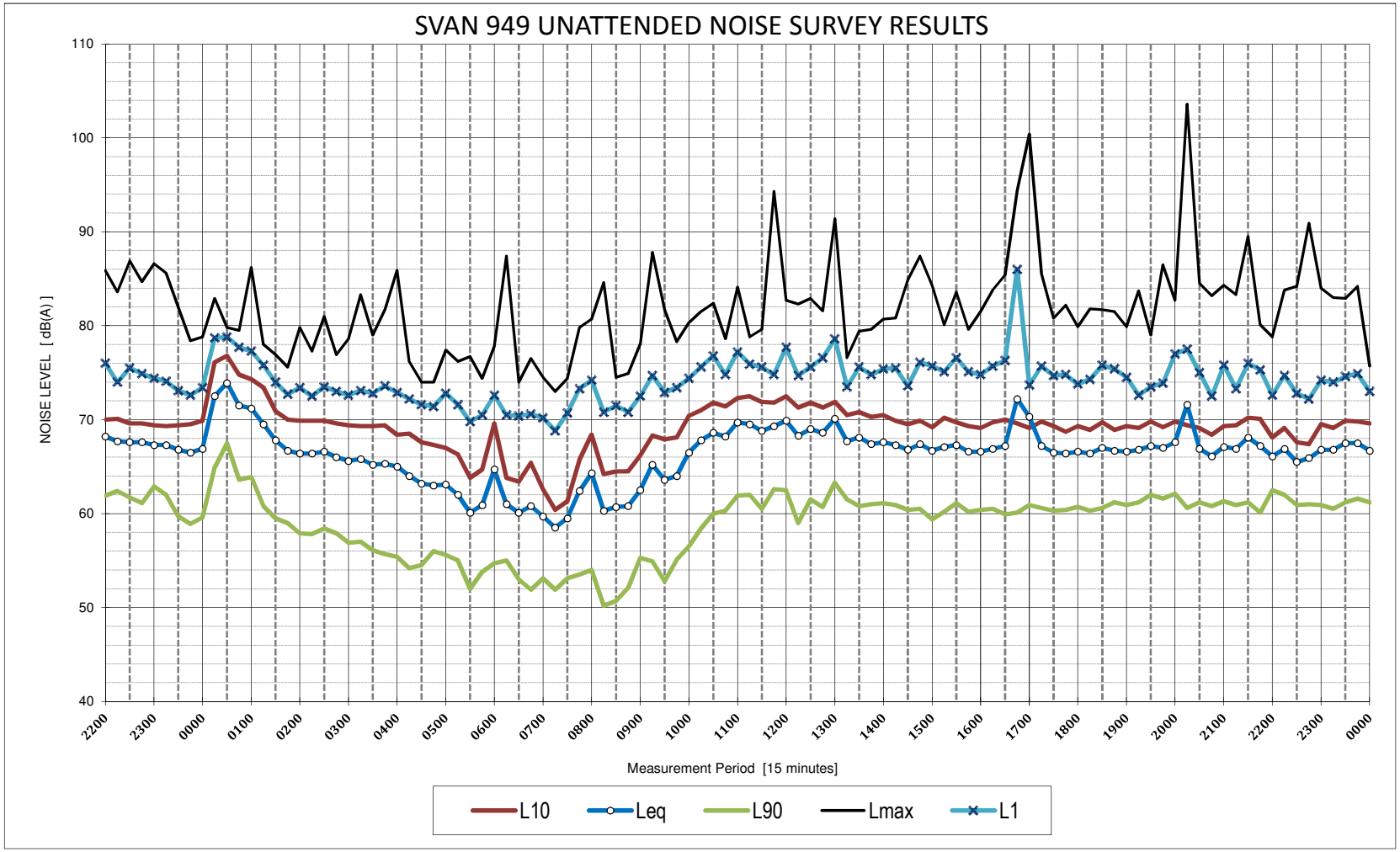
TRAFFIC & MISC. NOISE METRICS

Leq 15 hours	0700-2200	69	dB(A)
Leq 9 hours	2200-0700	65	dB(A)
Leq 24 hours	0000-2400	68	dB(A)
L10 18 hours	0600-2400	69	dB(A)
max Leq 1 hour	0700-2200	71	dB(A)
max Leq 1 hour	2200-0700	67	dB(A)

Maximum noise events as defined in the Envirnmental Noise Management Manual [Lmax - Leq ≥ 15]	0

		Frequency [Hz]									
Descritpor	**Period**	**31.5**	**63**	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**Total A**
10% min L90 Daytime	0700-1800	18	30	38	45	48	47	41	36	31	52
10% min L90 Evening	1800-2200	25	36	43	49	53	55	53	47	39	60
10% min L90 Night	2200-0700	17	30	39	46	48	48	41	35	31	53
10% min L90 Period	0000-0700	17	30	38	46	48	48	41	35	30	53
10% min L90 Period	0700-0000	17	30	39	47	49	49	42	37	31	54
Leq 15 hours	0700-2200	34	47	53	56	59	65	63	59	55	69
Leq 9 hours	2200-0700	27	42	49	53	57	61	60	53	47	65

DAY 6 **LOGGER LOCATION:** 141 Waldron Road, Chester Hill **DATE:** Thursday, 16 April 2015



AMBIENT NOISE METRICS

Descriptor	Period	Level	Units
L90 Daytime	0700-1800	53	dB(A)
L90 Evening	1800-2200	60	dB(A)
L90 Nighttime	2200-0700	54	dB(A)
Leq Daytime	0700-1800	68	dB(A)
Leq Evening	1800-2200	67	dB(A)
Leq Nighttime	2200-0700	65	dB(A)

TRAFFIC & MISC. NOISE METRICS

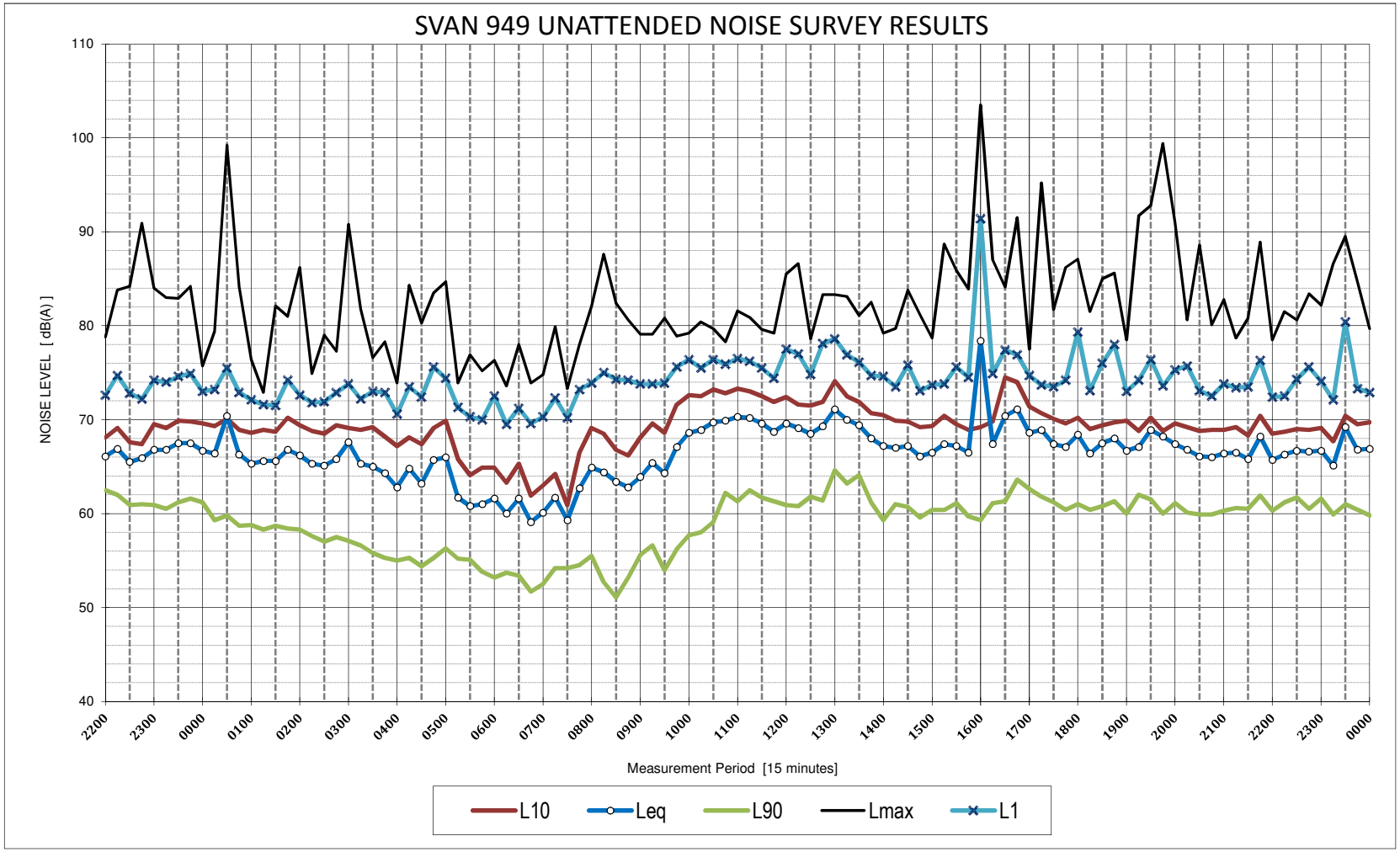
Leq 15 hours	0700-2200	68	dB(A)
Leq 9 hours	2200-0700	65	dB(A)
Leq 24 hours	0000-2400	67	dB(A)
L10 18 hours	0600-2400	69	dB(A)
max Leq 1 hour	0700-2200	69	dB(A)
max Leq 1 hour	2200-0700	67	dB(A)

Maximum noise events as defined in the Envirnmental Noise Management Manual [Lmax - Leq ≥ 15]	1

Note: This day has been removed from calculations as it was affected by rain.

		Frequency [Hz]									
Descritpor	**Period**	**31.5**	**63**	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**Total A**
10% min L90 Daytime	0700-1800	17	30	39	46	48	47	41	36	31	53
10% min L90 Evening	1800-2200	25	37	44	51	54	56	53	48	40	60
10% min L90 Night	2200-0700	17	30	39	47	49	49	43	37	32	54
10% min L90 Period	0000-0700	17	30	39	47	49	48	42	37	32	54
10% min L90 Period	0700-0000	17	30	39	47	49	48	41	37	31	53
Leq 15 hours	0700-2200	34	47	53	57	60	63	62	56	51	68
Leq 9 hours	2200-0700	28	43	49	53	56	61	59	53	47	65

DAY 7 **LOGGER LOCATION:** 141 Waldron Road, Chester Hill **DATE:** Friday, 17 April 2015



AMBIENT NOISE METRICS

Descriptor	Period	Level	Units
L90 Daytime	0700-1800	54	dB(A)
L90 Evening	1800-2200	60	dB(A)
L90 Nighttime	2200-0700	54	dB(A)
Leq Daytime	0700-1800	69	dB(A)
Leq Evening	1800-2200	67	dB(A)
Leq Nighttime	2200-0700	66	dB(A)

TRAFFIC & MISC. NOISE METRICS

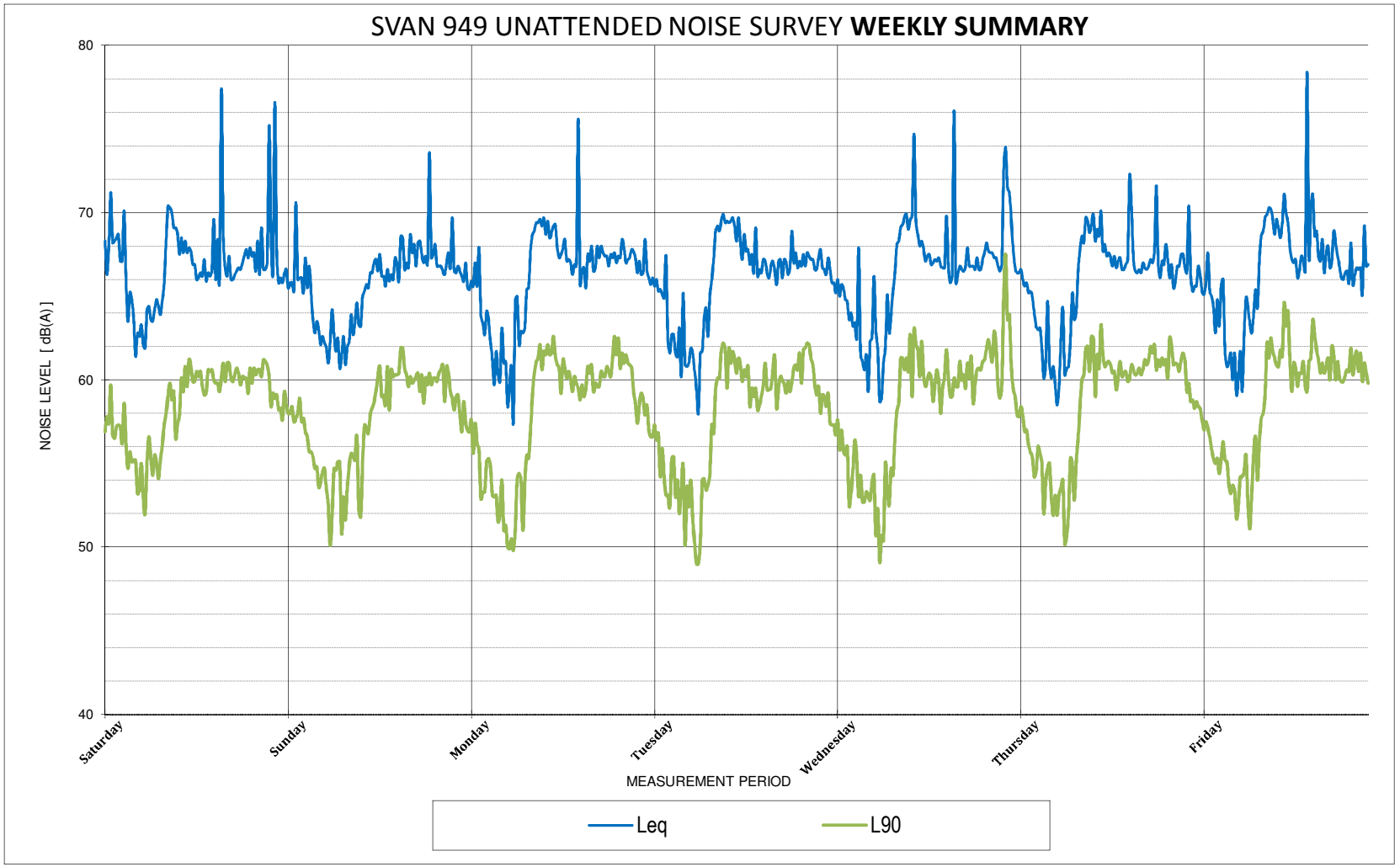
Leq 15 hours	0700-2200	69	dB(A)
Leq 9 hours	2200-0700	66	dB(A)
Leq 24 hours	0000-2400	68	dB(A)
L10 18 hours	0600-2400	70	dB(A)
max Leq 1 hour	0700-2200	70	dB(A)
max Leq 1 hour	2200-0700	68	dB(A)

Maximum noise events as defined in the Envirnmental Noise Management Manual [Lmax - Leq ≥ 15]	0

Note: This day has been removed from calculations as it was affected by rain.

		Frequency [Hz]									
Descritpor	**Period**	**31.5**	**63**	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**Total A**
10% min L90 Daytime	0700-1800	18	30	39	47	49	49	43	39	36	54
10% min L90 Evening	1800-2200	27	37	44	50	53	55	54	49	42	60
10% min L90 Night	2200-0700	17	30	39	46	48	49	43	39	36	54
10% min L90 Period	0000-0700	17	30	39	46	48	49	42	39	35	54
10% min L90 Period	0700-0000	17	30	39	47	50	49	44	39	35	54
Leq 15 hours	0700-2200	34	47	53	56	59	65	62	58	54	69
Leq 9 hours	2200-0700	28	42	49	53	56	61	60	57	54	66

WEEKLY SUMMARY **LOGGER LOCATION:** 141 Waldron Road, Chester Hill **PERIOD:** 11th to 17th February 2015



SUMMARY OF AMBIENT NOISE LEVELS

	L90 Daytime	*L90* Evening	*L90* Nighttime
Day 1	55	60	55
Day 2	52	59	54
Day 3	51	60	53
Day 4	52	59	53
Day 5	52	60	53
Day 6	53	60	54
Day 7	54	60	54
RBL	**52**	**60**	**53**

	Leq Daytime	*Leq* Evening	*Leq* Nighttime
Day 1	68	70	67
Day 2	67	67	64
Day 3	68	67	65
Day 4	68	67	65
Day 5	68	69	65
Day 6	68	67	65
Day 7	69	67	66
Average	**68**	**68**	**65**

SUMMARY OF TRAFFIC & MISC. NOISE LEVELS

Leq 15 hrs	0700-2200	68	dB(A)
Leq 9 hrs	2200-0700	65	dB(A)
Leq 24 hrs	0000-2400	67	dB(A)
L10 18 hrs	0600-2400	69	dB(A)
max Leq 1 hr	0700-2200	70	dB(A)
max Leq 1 hr	2200-0700	67	dB(A)

Maximum noise events as defined in the Environmental Noise Management Manual 7 day average - [Lmax - Leq ≥ 15]	0

* *Sundays and Public Holidays the hours change to 0800*

Note: All summary values exclude Day 1, Day 6 and Day 7 due to rain

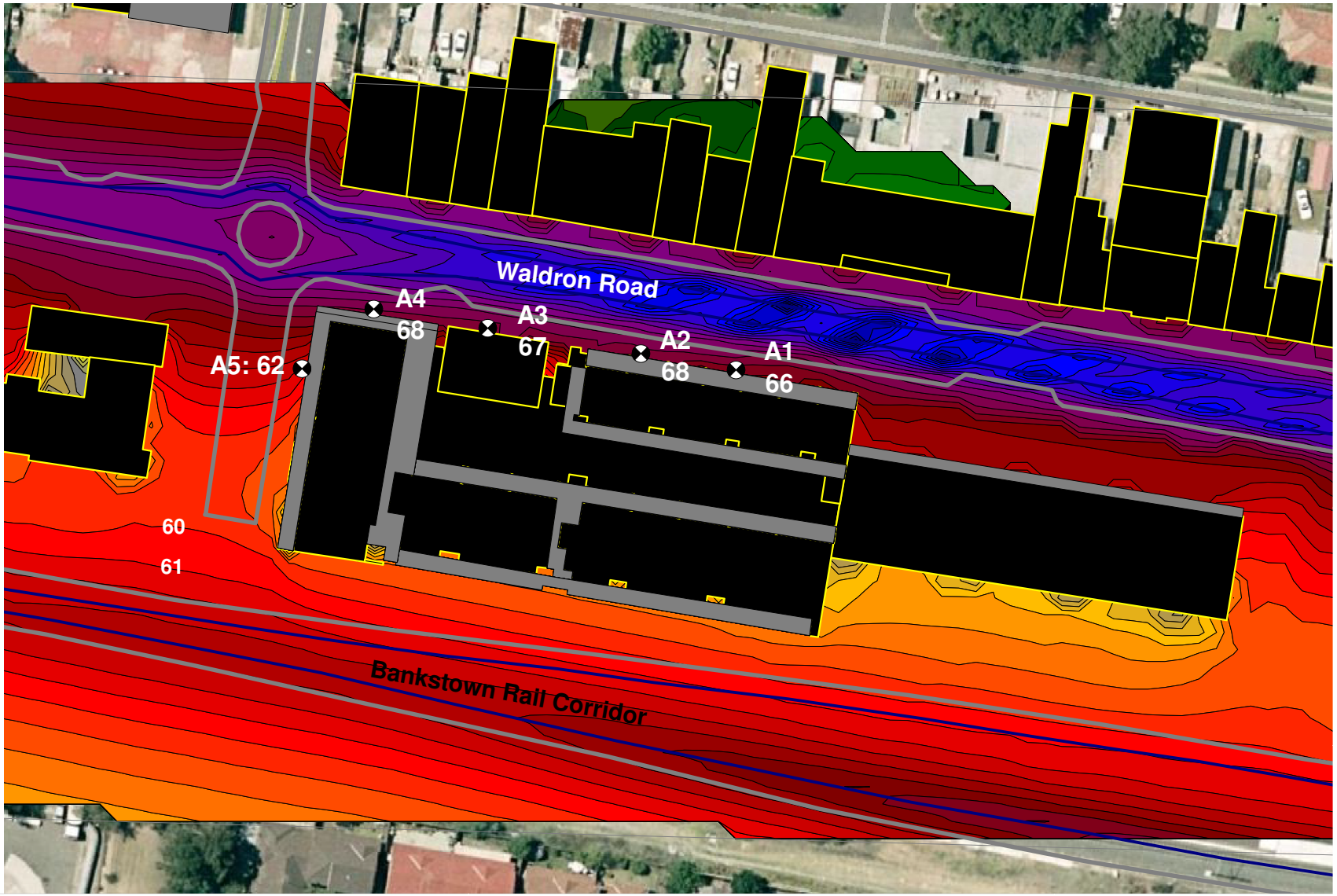
WEEKKLY SUMMARY

		Frequency [Hz]									
Descritpor	**Period**	**31.5**	**63**	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**Total A**
10% min L90 Daytime	0700-1800*	17	29	37	45	47	47	41	35	30	52
10% min L90 Evening	1800-2200	25	36	43	49	53	55	53	47	39	60
10% min L90 Night	2200-0700*	17	30	39	46	48	48	42	36	31	53
10% min L90 Period	0000-0700	17	30	38	46	48	48	42	36	31	53
10% min L90 Period	0700-0000	17	30	38	46	48	48	42	37	32	53
Leq 15 hours	0700-2200	33	47	53	56	59	64	62	57	52	68
Leq 9 hours	2200-0700	27	42	49	53	57	61	59	53	47	65

APPENDIX C

APPENDIX C

APPENDIX C



Ground
**** NOISE SOURCES ****

~ Waldron Road
~ Bankstown Rail Corridor

Note:

- LAeq15hrs noise level contours shown are at a height of 1.5 m above the Ground.

- Night-time noise levels are approximately 3db lower.

- The maximum reading at the nearest resident is 68 dBA.

PRINT DATE:08/05/15
VERSION: S1- Existing Condition Day time 0700-2200

- Line Source
- Building
- 3D-Reflector
- Contour Line
- Receiver
- Calculation Area

- > -99.0 dB
- > 35.0 dB
- > 40.0 dB
- > 45.0 dB
- > 50.0 dB
- > 55.0 dB
- > 60.0 dB
- > 65.0 dB
- > 70.0 dB
- > 75.0 dB
- > 80.0 dB
- > 85.0 dB

JOB NUMBER: 2727
CLIENT: Athena Hatgivlastis
SITE ADDRESS: 141 Waldron Road, Chester Hill
ASSESSED TO: State Environmental Planing Policy
LIMITING CRITERIA: 35 dBA-Bedroom (2200-0700)
40 dBA-other (0700-2200)

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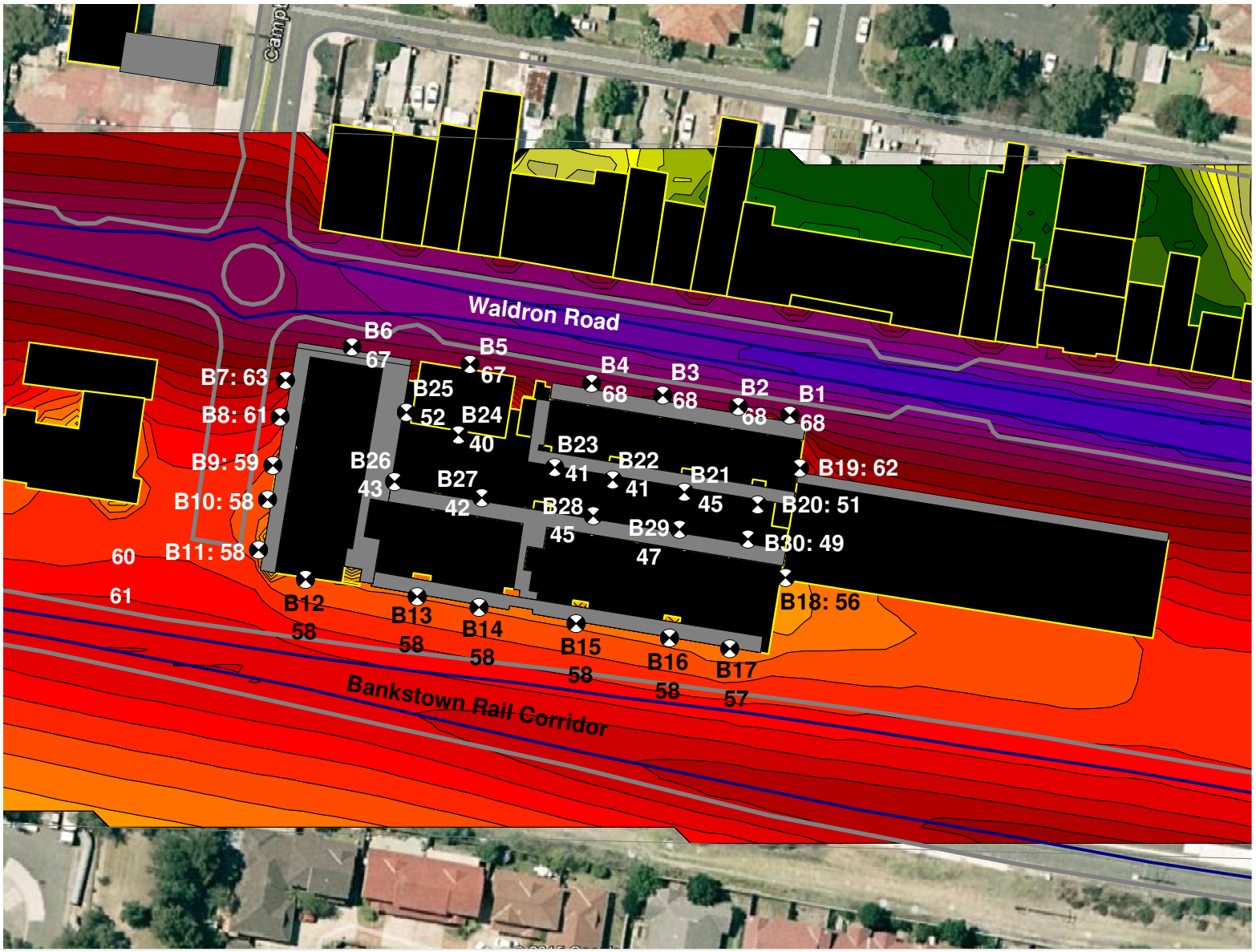

Level 1
**** NOISE SOURCES ****

~ Waldron Road
~ Bankstown Rail Corridor

Note:

- LAeq15hrs noise level contours shown are at a height of 1.5 m above Ground Floor.

- Night-time noise levels are approximately 3db lower.

- The maximum reading at the nearest resident is 68 dBA.

PRINT DATE:08/05/15
VERSION: S1- Existing Condition
Day time 0700-2200

Line Source
Building
3D-Reflector
Contour Line
Receiver
Calculation Area

> -99.0 dB
> 35.0 dB
> 40.0 dB
> 45.0 dB
> 50.0 dB
> 55.0 dB
> 60.0 dB
> 65.0 dB
> 70.0 dB
> 75.0 dB
> 80.0 dB
> 85.0 dB

JOB NUMBER: 2727
CLIENT: Athena Hatgivlastis
SITE ADDRESS: 141 Waldron Road, Chester Hill
ASSESSED TO: State Environmental Planing Policy
LIMITING CRITERIA: 35 dBA-Bedroom (2200-0700)
40 dBA-other (0700-2200)

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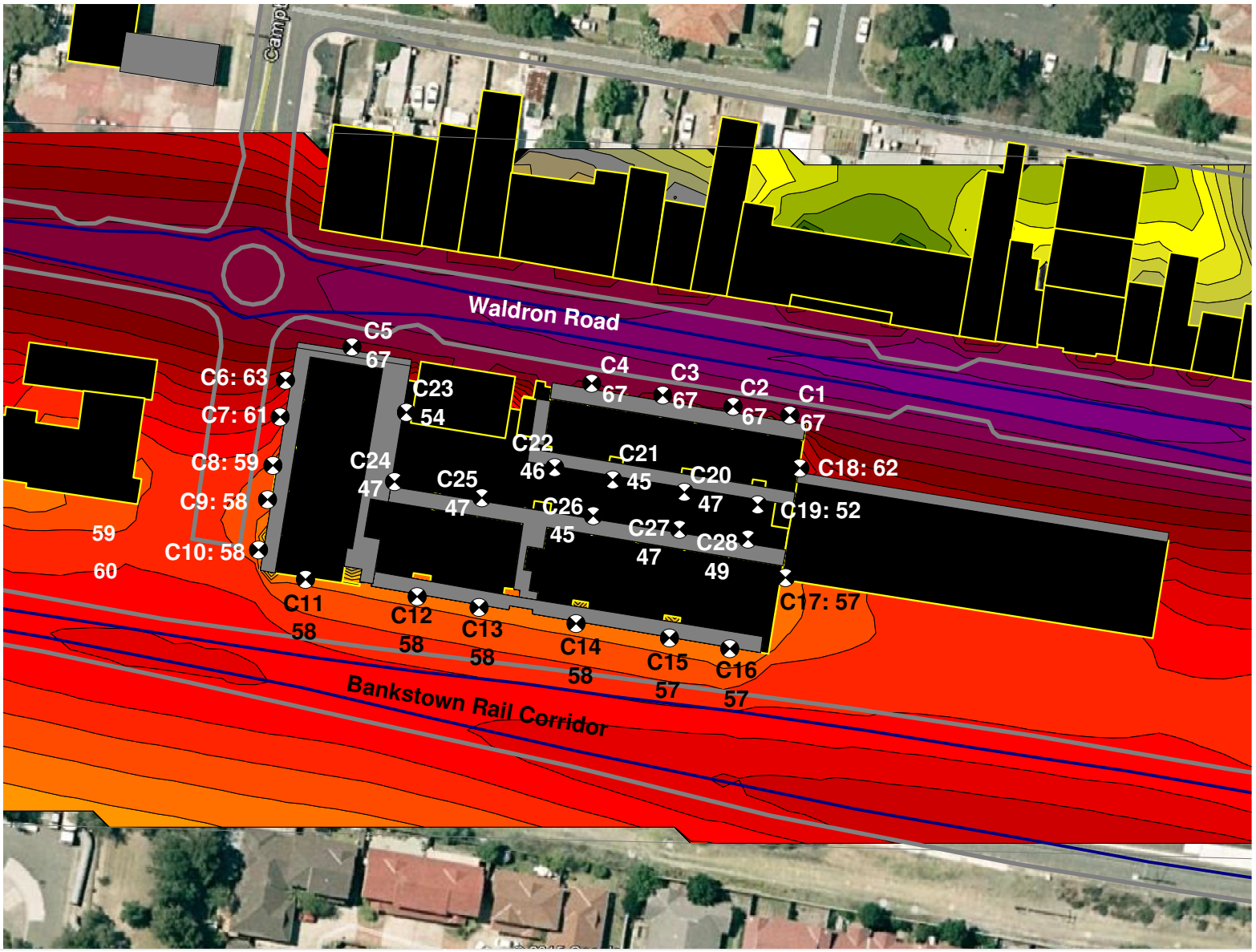

Level 2
**** NOISE SOURCES ****

~ Waldron Road
~ Bankstown Rail Corridor

Note:

- LAeq15hrs noise level contours shown are at a height of 1.5 m above Level 1.

- Night-time noise levels are approximately 3db lower.

- The maximum reading at the nearest resident is 67 dBA.

PRINT DATE:08/05/15
VERSION: S1- Existing Condition
Day time 0700-2200

Line Source
Building
3D-Reflector
Contour Line
Receiver
Calculation Area

> -99.0 dB
> 35.0 dB
> 40.0 dB
> 45.0 dB
> 50.0 dB
> 55.0 dB
> 60.0 dB
> 65.0 dB
> 70.0 dB
> 75.0 dB
> 80.0 dB
> 85.0 dB

JOB NUMBER: 2727
CLIENT: Athena Hatgivlastis
SITE ADDRESS: 141 Waldron Road, Chester Hill
ASSESSED TO: State Environmental Planing Policy
LIMITING CRITERIA: 35 dBA-Bedroom (2200-0700)
40 dBA-other (0700-2200)

N
W E
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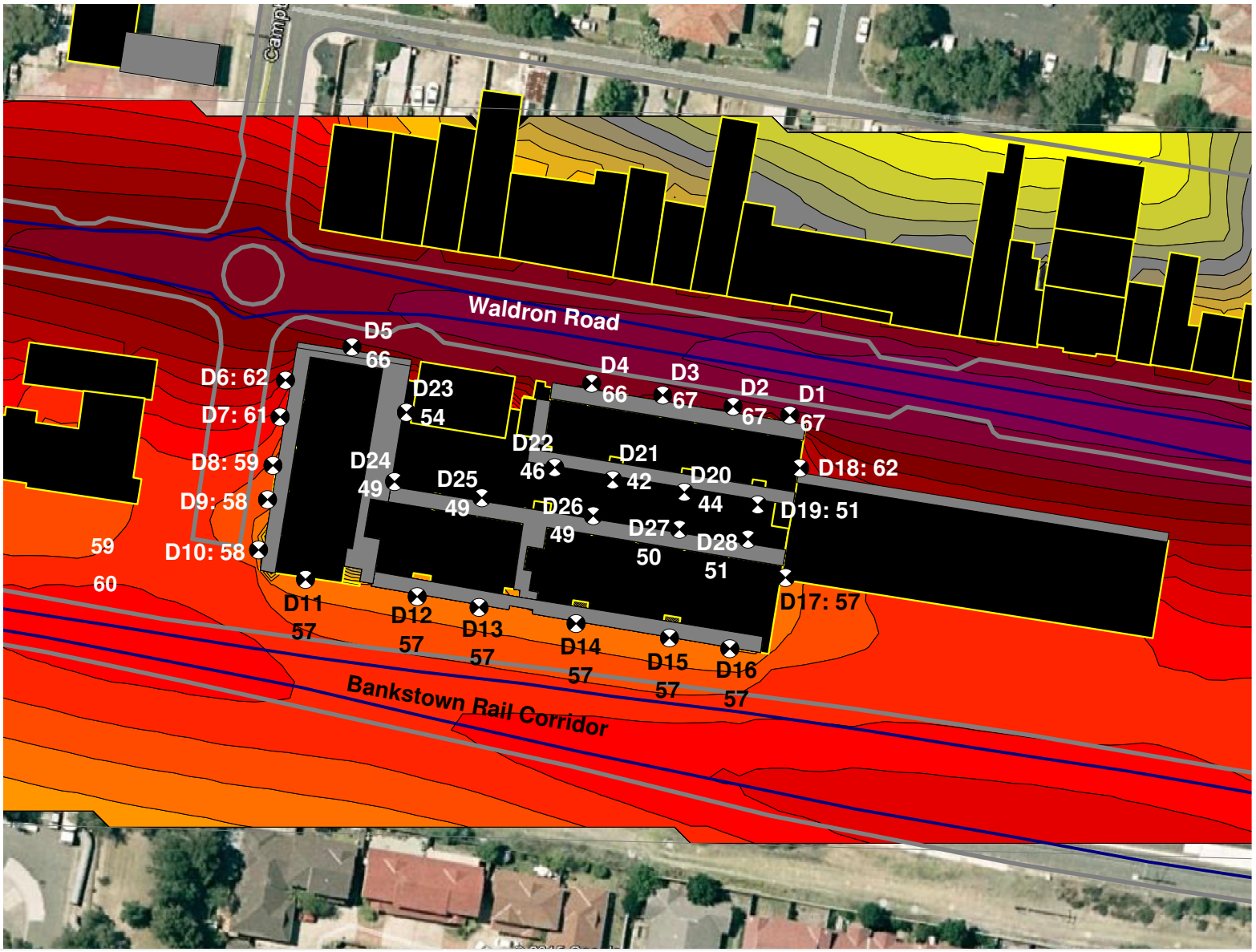

Level 3
**** NOISE SOURCES ****

~ Waldron Road
~ Bankstown Rail Corridor

Note:

- LAeq15hrs noise level contours shown are at a height of 1.5 m above Level 2.

- Night-time noise levels are approximately 3db lower.

- The maximum reading at the nearest resident is 67 dBA.

PRINT DATE:08/05/15
VERSION: S1- Existing Condition
Day time 0700-2200

Line Source
Building
3D-Reflector
Contour Line
Receiver
Calculation Area

> -99.0 dB
> 35.0 dB
> 40.0 dB
> 45.0 dB
> 50.0 dB
> 55.0 dB
> 60.0 dB
> 65.0 dB
> 70.0 dB
> 75.0 dB
> 80.0 dB
> 85.0 dB

JOB NUMBER: 2727
CLIENT: Athena Hatgivlastis
SITE ADDRESS: 141 Waldron Road, Chester Hill
ASSESSED TO: State Environmental Planing Policy
LIMITING CRITERIA: 35 dBA-Bedroom (2200-0700)
40 dBA-other (0700-2200)

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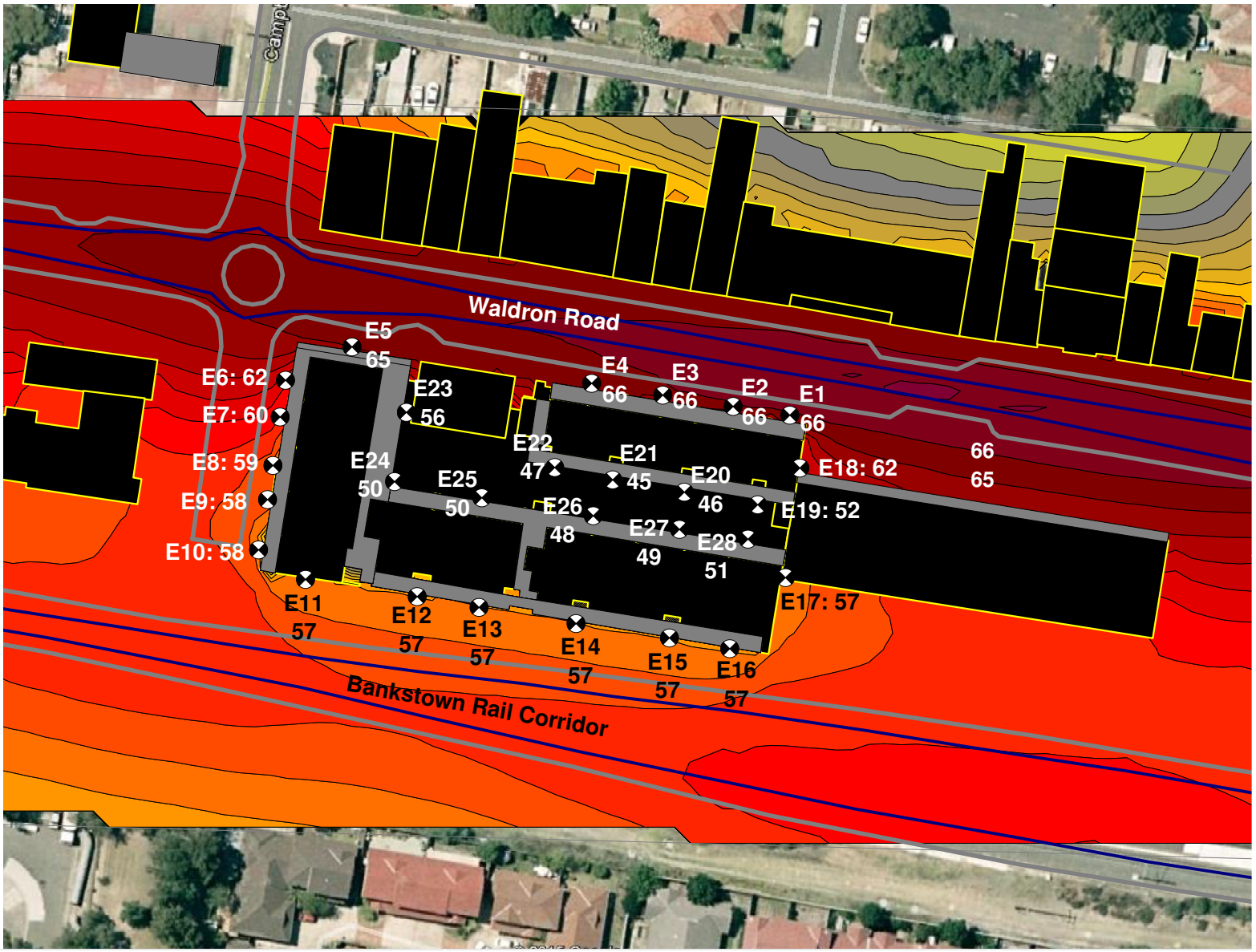

Level 4
**** NOISE SOURCES ****

~ Waldron Road
~ Bankstown Rail Corridor

Note:

- LAeq15hrs noise level contours shown are at a height of 1.5 m above Level 3.

- Night-time noise levels are approximately 3db lower.

- The maximum reading at the nearest resident is 66 dBA.

PRINT DATE:08/05/15
VERSION: S1- Existing Condition
Day time 0700-2200

Line Source
Building
3D-Reflector
Contour Line
Receiver
Calculation Area

> -99.0 dB
> 35.0 dB
> 40.0 dB
> 45.0 dB
> 50.0 dB
> 55.0 dB
> 60.0 dB
> 65.0 dB
> 70.0 dB
> 75.0 dB
> 80.0 dB
> 85.0 dB

JOB NUMBER: 2727
CLIENT: Athena Hatgivlastis
SITE ADDRESS: 141 Waldron Road, Chester Hill
ASSESSED TO: State Environmental Planing Policy
LIMITING CRITERIA: 35 dBA-Bedroom (2200-0700)
40 dBA-other (0700-2200)

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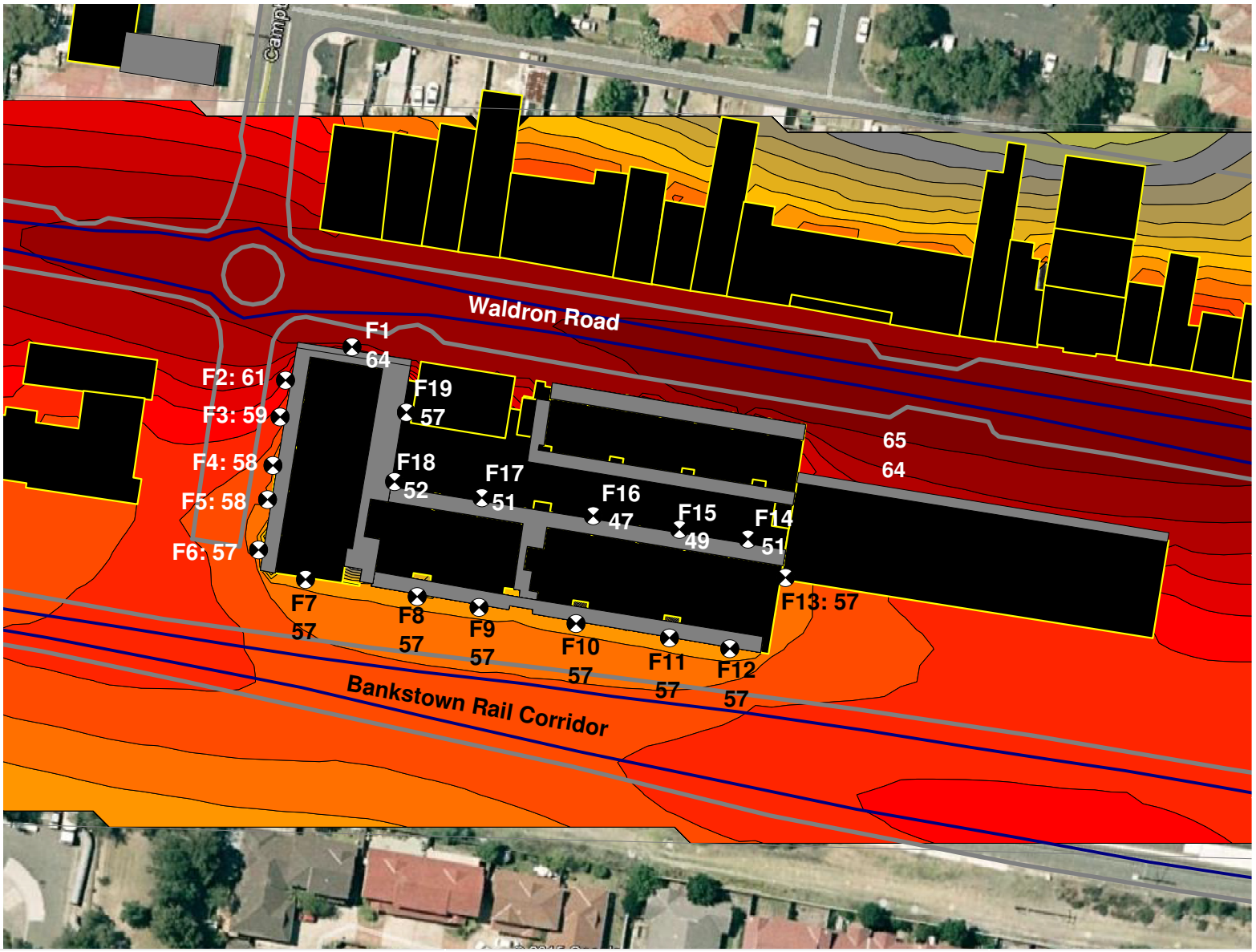

Level 5
**** NOISE SOURCES ****

~ Waldron Road
~ Bankstown Rail Corridor

Note:

- LAeq15hrs noise level contours shown are at a height of 1.5 m above Level 4.

- Night-time noise levels are approximately 3db lower.

- The maximum reading at the nearest resident is 64 dBA.

PRINT DATE:08/05/15
VERSION: S1- Existing Condition
Day time 0700-2200

Line Source
Building
3D-Reflector
Contour Line
Receiver
Calculation Area

> -99.0 dB
> 35.0 dB
> 40.0 dB
> 45.0 dB
> 50.0 dB
> 55.0 dB
> 60.0 dB
> 65.0 dB
> 70.0 dB
> 75.0 dB
> 80.0 dB
> 85.0 dB

JOB NUMBER: 2727
CLIENT: Athena Hatgivlastis
SITE ADDRESS: 141 Waldron Road, Chester Hill
ASSESSED TO: State Environmental Planing Policy
LIMITING CRITERIA: 35 dBA-Bedroom (2200-0700)
40 dBA-other (0700-2200)

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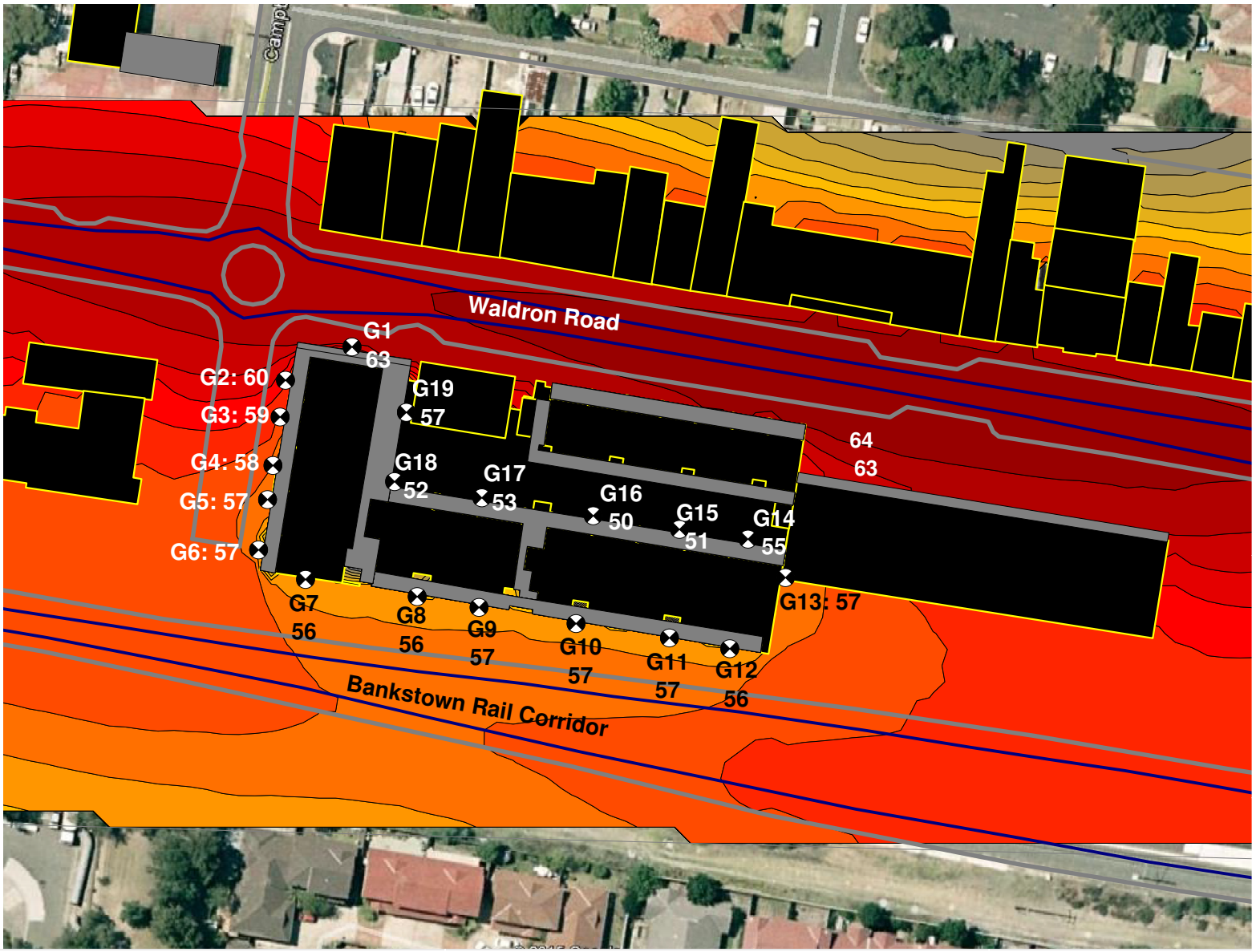

Level 6
**** NOISE SOURCES ****

~ Waldron Road
~ Bankstown Rail Corridor

Note:

- LAeq15hrs noise level contours shown are at a height of 1.5 m above Level 5.

- Night-time noise levels are approximately 3db lower.

- The maximum reading at the nearest resident is 63 dBA.

PRINT DATE:08/05/15
VERSION: S1- Existing Condition
Day time 0700-2200

Line Source
Building
3D-Reflector
Contour Line
Receiver
Calculation Area

> -99.0 dB
> 35.0 dB
> 40.0 dB
> 45.0 dB
> 50.0 dB
> 55.0 dB
> 60.0 dB
> 65.0 dB
> 70.0 dB
> 75.0 dB
> 80.0 dB
> 85.0 dB

JOB NUMBER: 2727
CLIENT: Athena Hatgivlastis
SITE ADDRESS: 141 Waldron Road, Chester Hill
ASSESSED TO: State Environmental Planing Policy
LIMITING CRITERIA: 35 dBA-Bedroom (2200-0700)
40 dBA-other (0700-2200)

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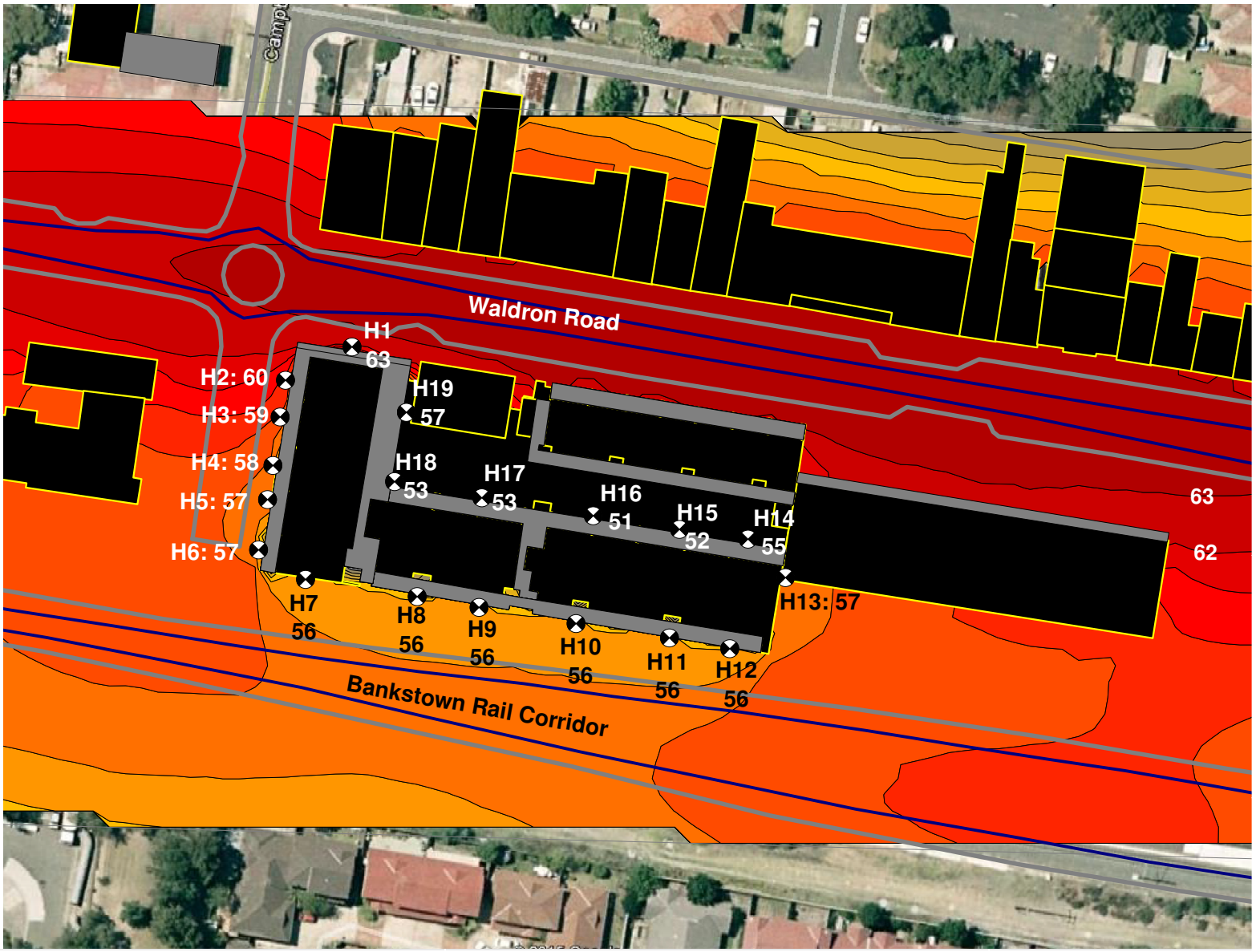

Level 7
**** NOISE SOURCES ****

~ Waldron Road
~ Bankstown Rail Corridor

Note:

- LAeq15hrs noise level contours shown are at a height of 1.5 m above Level 6.

- Night-time noise levels are approximately 3db lower.

- The maximum reading at the nearest resident is 63 dBA.

PRINT DATE:08/05/15
VERSION: S1- Existing Condition
Day time 0700-2200

Line Source
Building
3D-Reflector
Contour Line
Receiver
Calculation Area

> -99.0 dB
> 35.0 dB
> 40.0 dB
> 45.0 dB
> 50.0 dB
> 55.0 dB
> 60.0 dB
> 65.0 dB
> 70.0 dB
> 75.0 dB
> 80.0 dB
> 85.0 dB

JOB NUMBER: 2727
CLIENT: Athena Hatgivlastis
SITE ADDRESS: 141 Waldron Road, Chester Hill
ASSESSED TO: State Environmental Planing Policy
LIMITING CRITERIA: 35 dBA-Bedroom (2200-0700)
40 dBA-other (0700-2200)

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APPENDIX D

APPENDIX D

APPENDIX D

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Retail 1

ROOM DATA
Height= 2.7 m Depth= 8 m
Width= 29 m VOL= 626.4 m3

	63	125	250	500	1k	2k	4k	8k	A
Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
FAÇADE 1 (North) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - A2	50	56	58	62	67	64	60	55	71
STL 1 *AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	1.1
STL 2 *6.38mm laminated glass - door*	*17*	*24*	*29*	*31*	*36*	*33*	*38*	*41*	8.1
STL 3 *10.38mm laminated glass - window*	*22*	*26*	*31*	*35*	*35*	*35*	*42*	*48*	60.8
STL 4									
Noise through Component 1	-1	3	2	-3	-6	-16	-22	-29	7
Noise through Component 2	26	25	22	24	24	24	15	6	32
Noise through Component 3	30	32	29	29	34	31	19	8	39
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**31**	**33**	**29**	**30**	**34**	**31**	**21**	**10**	**40**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	31	33	29	30	34	31	21	10	40
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**31**	**33**	**29**	**30**	**34**	**31**	**21**	**11**	**40**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Retail 2

ROOM DATA
Height= 2.7 m Depth= 9 m
Width= 20 m VOL= 486.0 m3

		63	125	250	500	1k	2k	4k	8k	A
	Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
	FAÇADE 1 (North) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - A3	50	56	58	62	66	64	60	55	70
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	1.1
STL 2	*6.38mm laminated glass - door*	*17*	*24*	*29*	*31*	*36*	*33*	*38*	*41*	4.1
STL 3	*10.38mm laminated glass - window*	*22*	*26*	*31*	*35*	*35*	*35*	*42*	*48*	45.9
STL 4										
	Noise through Component 1	0	4	3	-2	-6	-15	-21	-28	8
	Noise through Component 2	24	23	20	22	21	22	13	4	30
	Noise through Component 3	30	32	28	29	33	30	19	8	38
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 1	**31**	**32**	**29**	**30**	**33**	**31**	**20**	**10**	**39**
	FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	31	32	29	30	33	31	20	10	39
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**31**	**32**	**29**	**30**	**33**	**31**	**20**	**11**	**39**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Retail 3

ROOM DATA
Height= 2.7 m Depth= 15 m
Width= 9 m VOL= 364.5 m3

		63	125	250	500	1k	2k	4k	8k	A
	Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
	FAÇADE 1 (North) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - A4	50	57	59	63	67	65	60	56	71
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	0.5
STL 2	*6.38mm laminated glass - door*	*17*	*24*	*29*	*31*	*36*	*33*	*38*	*41*	1.9
STL 3	*6.38mm laminated glass - window*	*17*	*24*	*29*	*31*	*36*	*33*	*38*	*41*	14.9
STL 4										
	Noise through Component 1	-2	3	2	-3	-7	-16	-23	-28	7
	Noise through Component 2	22	22	19	21	20	21	11	3	29
	Noise through Component 3	31	31	28	30	29	30	20	12	38
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 1	**31**	**31**	**28**	**30**	**29**	**30**	**20**	**13**	**38**
	FAÇADE 2 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - A5	45	51	53	57	61	59	54	48	65
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	1.4
STL 2	*4mm toughened glass - door*	*15*	*19*	*23*	*24*	*27*	*29*	*26*	*31*	1.9
STL 3	*6.38mm laminated glass - window*	*17*	*24*	*29*	*31*	*36*	*33*	*38*	*41*	32.4
STL 4										
	Noise through Component 1	-3	1	0	-5	-9	-18	-25	-32	5
	Noise through Component 2	19	21	19	22	23	19	17	5	29
	Noise through Component 3	29	28	25	27	26	27	17	7	35
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 2	**30**	**29**	**26**	**28**	**28**	**28**	**20**	**10**	**36**
	FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	31	31	28	30	29	30	20	13	38
Façade 2	30	29	26	28	28	28	20	10	36
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**34**	**33**	**30**	**32**	**32**	**32**	**23**	**15**	**40**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 1

ROOM DATA
Height= 2.7 m Depth= 3.3 m
Width= 3 m VOL= 26.7 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (south) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B17	40	48	52	52	56	54	46	31	60
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	1.9
STL 2 *4mm annealed monolithic glass - window*	16	21	22	29	33	35	31	36	6.8
STL 3									
STL 4									
Noise through Component 1	3	9	10	1	-3	-12	-23	-39	13
Noise through Component 2	28	30	33	27	26	22	18	-2	37
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**28**	**30**	**33**	**27**	**26**	**22**	**18**	**4**	**37**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	28	30	33	27	26	22	18	4	37
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**28**	**30**	**33**	**27**	**26**	**22**	**18**	**7**	**37**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 1

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 4.3 m VOL= 34.8 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (north) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B30	32	37	38	40	44	42	36	25	49
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	5.4
STL 2 *4mm toughened glass - sliding door*	15	19	23	24	27	29	26	31	6.8
STL 3									
STL 4									
Noise through Component 1	-2	1	-1	-8	-12	-21	-29	-41	5
Noise through Component 2	19	20	17	18	19	15	12	-4	26
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**20**	**20**	**17**	**18**	**19**	**15**	**12**	**4**	**26**
FAÇADE 2 (east) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B18	35	40	41	43	47	45	39	28	52
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	8.1
STL 2									
STL 3									
STL 4									
Noise through Component 1	3	6	4	-3	-7	-16	-24	-37	10
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**7**	**8**	**7**	**5**	**5**	**5**	**5**	**5**	**11**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	20	20	17	18	19	15	12	4	26
Façade 2	7	8	7	5	5	5	5	5	11
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**20**	**20**	**18**	**19**	**19**	**16**	**13**	**9**	**27**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 8 m
Width= 4.5 m VOL= 97.2 m3

	63	125	250	500	1k	2k	4k	8k	A
Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
FAÇADE 1 (north) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B30	35	40	41	43	47	45	39	28	52
STL 1 *AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	2.7
STL 2 *4mm toughened glass - sliding door*	*15*	*19*	*23*	*24*	*27*	*29*	*26*	*31*	9.5
STL 3									
STL 4									
Noise through Component 1	-4	-1	-3	-10	-14	-23	-31	-44	3
Noise through Component 2	22	23	20	21	22	18	15	-2	29
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**22**	**23**	**20**	**21**	**22**	**18**	**15**	**4**	**29**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	22	23	20	21	22	18	15	4	29
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**22**	**23**	**20**	**21**	**22**	**18**	**15**	**7**	**29**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 1

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (south) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B15	41	49	52	53	56	55	46	31	61
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	8.1
STL 2 *4mm annealed monolithic glass - window*	16	21	22	29	33	35	31	36	1.9
STL 3									
STL 4									
Noise through Component 1	11	16	17	8	3	-5	-16	-32	20
Noise through Component 2	23	26	28	22	21	18	13	-7	32
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**24**	**26**	**28**	**23**	**21**	**18**	**13**	**3**	**32**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	24	26	28	23	21	18	13	3	32
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**24**	**26**	**28**	**23**	**21**	**18**	**14**	**7**	**32**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 2

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (north) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B28	32	36	38	40	44	42	35	26	48
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	1.1
STL 2 *4mm toughened glass - sliding door*	15	19	23	24	27	29	26	31	8.1
STL 3									
STL 4									
Noise through Component 1	-7	-5	-6	-13	-17	-26	-36	-46	-1
Noise through Component 2	22	21	20	20	21	17	13	-1	28
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**22**	**21**	**20**	**20**	**21**	**17**	**14**	**4**	**28**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	22	21	20	20	21	17	14	4	28
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**22**	**21**	**20**	**21**	**22**	**18**	**14**	**8**	**29**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 9 m
Width= 4 m VOL= 97.2 m3

	63	125	250	500	1k	2k	4k	8k	A
Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
FAÇADE 1 (north) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B28	32	36	38	40	44	42	35	26	48
STL 1 *AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	2.7
STL 2 *4mm toughened glass - sliding door*	*15*	*19*	*23*	*24*	*27*	*29*	*26*	*31*	9.5
STL 3									
STL 4									
Noise through Component 1	-7	-5	-6	-13	-17	-26	-35	-46	-1
Noise through Component 2	19	19	17	18	19	15	11	-4	26
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**19**	**19**	**17**	**18**	**19**	**15**	**11**	**4**	**26**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	19	19	17	18	19	15	11	4	26
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**19**	**19**	**17**	**18**	**19**	**15**	**12**	**7**	**26**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 1

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	*0.4*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.33*
FAÇADE 1 (south) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B13	41	49	52	53	56	55	46	31	61
STL 1 *AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	8.1
STL 2 *4mm annealed monolithic glass - window*	*16*	*21*	*22*	*29*	*33*	*35*	*31*	*36*	1.9
STL 3									
STL 4									
Noise through Component 1	11	16	17	8	3	-5	-16	-32	20
Noise through Component 2	23	26	28	22	21	18	13	-7	32
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**24**	**26**	**28**	**23**	**21**	**18**	**13**	**3**	**32**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	24	26	28	23	21	18	13	3	32
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**24**	**26**	**28**	**23**	**21**	**18**	**14**	**7**	**32**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 2

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (north) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B27	32	36	36	37	40	37	31	21	45
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	1.1
STL 2 *4mm toughened glass - sliding door*	15	19	23	24	27	29	26	31	8.1
STL 3									
STL 4									
Noise through Component 1	-7	-5	-8	-16	-21	-31	-40	-51	-2
Noise through Component 2	22	21	18	17	17	12	9	-6	27
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**22**	**21**	**18**	**18**	**18**	**13**	**10**	**4**	**27**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	22	21	18	18	18	13	10	4	27
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**22**	**21**	**18**	**18**	**18**	**13**	**11**	**7**	**27**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 9 m
Width= 4 m VOL= 97.2 m3

	63	125	250	500	1k	2k	4k	8k	A
Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.60*
FAÇADE 1 (north) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B27	32	36	36	37	40	37	31	21	45
STL 1 *AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	2.7
STL 2 *4mm toughened glass - sliding door*	*15*	*19*	*23*	*24*	*27*	*29*	*26*	*31*	9.5
STL 3									
STL 4									
Noise through Component 1	-7	-5	-8	-16	-21	-31	-39	-51	-1
Noise through Component 2	19	19	15	15	15	10	7	-9	24
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**19**	**19**	**15**	**15**	**15**	**10**	**8**	**3**	**24**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	19	19	15	15	15	10	8	3	24
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**19**	**19**	**15**	**15**	**15**	**11**	**10**	**7**	**25**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 1

ROOM DATA
Height= 2.7 m Depth= 3.5 m
Width= 3.5 m VOL= 33.1 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (east) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B12	38	46	49	50	53	52	44	28	58
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	4.1
STL 2 *4mm annealed monolithic - window*	16	21	22	29	33	35	31	36	5.4
STL 3									
STL 4									
Noise through Component 1	3	9	9	1	-4	-12	-22	-39	13
Noise through Component 2	24	26	28	23	21	18	14	-7	32
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**24**	**26**	**28**	**23**	**21**	**18**	**14**	**3**	**32**
FAÇADE 2 (south) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B12	38	46	49	50	53	52	44	28	58
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	9.5
STL 2									
STL 3									
STL 4									
Noise through Component 1	7	13	13	5	0	-8	-18	-36	17
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**9**	**13**	**13**	**8**	**6**	**5**	**5**	**5**	**17**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	24	26	28	23	21	18	14	3	32
Façade 2	9	13	13	8	6	5	5	5	17
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**24**	**26**	**28**	**23**	**21**	**19**	**15**	**9**	**33**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 5.5 m
Width= 7 m VOL= 104.0 m3

		63	125	250	500	1k	2k	4k	8k	A
	Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.60*
	FAÇADE 1 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B11	41	48	51	53	57	55	48	39	61
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	2.7
STL 2	*4mm toughened glass - sliding door*	*15*	*19*	*23*	*24*	*27*	*29*	*26*	*31*	12.2
STL 3										
STL 4										
	Noise through Component 1	2	7	7	0	-4	-13	-22	-33	11
	Noise through Component 2	28	31	30	31	32	28	24	10	39
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 1	**28**	**31**	**30**	**31**	**32**	**28**	**24**	**10**	**39**
	FAÇADE 2 (south) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B12	38	46	49	50	53	52	44	28	58
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	18.9
STL 2										
STL 3										
STL 4										
	Noise through Component 1	7	13	13	5	0	-8	-18	-35	17
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 2	**9**	**14**	**14**	**8**	**6**	**5**	**5**	**5**	**17**
	FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	28	31	30	31	32	28	24	10	39
Façade 2	9	14	14	8	6	5	5	5	17
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**28**	**31**	**31**	**31**	**32**	**28**	**25**	**12**	**39**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 2

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B9	42	48	51	53	58	56	50	43	62
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	1.1
STL 2 *6.38mm laminated glass - sliding door*	17	24	29	31	36	33	38	41	8.1
STL 3									
STL 4									
Noise through Component 1	3	7	7	0	-3	-12	-21	-29	11
Noise through Component 2	30	28	27	26	26	27	16	6	35
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**30**	**28**	**27**	**26**	**26**	**27**	**16**	**8**	**35**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	30	28	27	26	26	27	16	8	35
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**30**	**28**	**27**	**26**	**26**	**27**	**17**	**10**	**36**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 2

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B9	39	45	48	50	55	53	47	40	59
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	1.1
STL 2 *6.38mm laminated glass - sliding door*	17	24	29	31	36	33	38	41	8.1
STL 3									
STL 4									
Noise through Component 1	0	4	4	-3	-6	-15	-24	-32	8
Noise through Component 2	27	25	24	23	23	24	13	3	32
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**27**	**25**	**24**	**23**	**23**	**24**	**14**	**6**	**32**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	27	25	24	23	23	24	14	6	32
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**27**	**25**	**24**	**23**	**24**	**24**	**14**	**8**	**33**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 4.5 m
Width= 9 m VOL= 109.4 m3

	63	125	250	500	1k	2k	4k	8k	A
Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
FAÇADE 1 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B9	42	48	51	53	58	56	50	43	62
STL 1 *AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	1.4
STL 2 *4mm toughened glass - sliding door*	*15*	*19*	*23*	*24*	*27*	*29*	*26*	*31*	10.8
STL 3									
STL 4									
Noise through Component 1	0	4	4	-3	-6	-15	-23	-32	8
Noise through Component 2	29	31	30	31	33	29	26	13	38
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**29**	**31**	**30**	**31**	**33**	**29**	**26**	**13**	**38**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	29	31	30	31	33	29	26	13	38
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**29**	**31**	**30**	**31**	**33**	**29**	**26**	**14**	**38**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 2

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B7	46	52	55	58	62	60	55	50	66
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	1.1
STL 2 *10.38mm laminated glass*	22	26	31	35	35	35	42	48	8.1
STL 3									
STL 4									
Noise through Component 1	7	11	11	5	1	-8	-16	-22	15
Noise through Component 2	29	31	29	28	32	29	17	6	38
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**29**	**31**	**29**	**28**	**32**	**29**	**17**	**8**	**38**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	29	31	29	28	32	29	17	8	38
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**29**	**31**	**29**	**28**	**32**	**29**	**17**	**9**	**38**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 2

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	*0.4*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.33*
FAÇADE 1 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B7	43	49	52	55	59	57	52	47	63
STL 1 *AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	1.1
STL 2 *10.38mm laminated glass*	*22*	*26*	*31*	*35*	*35*	*35*	*42*	*48*	8.1
STL 3									
STL 4									
Noise through Component 1	4	8	8	2	-2	-11	-19	-25	12
Noise through Component 2	26	28	26	25	29	26	14	3	35
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**26**	**28**	**26**	**25**	**29**	**26**	**14**	**6**	**35**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	26	28	26	25	29	26	14	6	35
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**26**	**28**	**26**	**25**	**29**	**26**	**15**	**8**	**35**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 4.5 m
Width= 9 m VOL= 109.4 m3

		63	125	250	500	1k	2k	4k	8k	A
	Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
	FAÇADE 1 (North) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B6	47	53	55	59	63	61	57	52	67
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	8.1
STL 2	*10.38mm laminated glass - sliding door*	*22*	*26*	*31*	*35*	*35*	*35*	*42*	*48*	9.5
STL 3	*10.38mm laminated glass - window*	*22*	*26*	*31*	*35*	*35*	*35*	*42*	*48*	14.9
STL 4										
	Noise through Component 1	12	16	15	10	6	-3	-9	-15	20
	Noise through Component 2	26	29	25	25	29	27	16	4	35
	Noise through Component 3	28	31	27	27	31	29	18	6	37
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 1	**31**	**33**	**29**	**30**	**33**	**31**	**20**	**9**	**39**
	FAÇADE 2 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B7	46	52	55	58	62	60	55	50	66
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	1.4
STL 2	*10.38mm laminated glass - sliding door*	*22*	*26*	*31*	*35*	*35*	*35*	*42*	*48*	10.8
STL 3										
STL 4										
	Noise through Component 1	4	8	8	2	-2	-11	-18	-25	12
	Noise through Component 2	26	28	26	25	29	27	14	3	35
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 2	**26**	**28**	**26**	**25**	**29**	**27**	**15**	**6**	**35**
	FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	31	33	29	30	33	31	20	9	39
Façade 2	26	28	26	25	29	27	15	6	35
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**32**	**34**	**31**	**31**	**35**	**33**	**21**	**11**	**41**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 4 m
Width= 6 m VOL= 64.8 m3

		63	125	250	500	1k	2k	4k	8k	A
	Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
	FAÇADE 1 (North) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B4	50	56	59	62	67	64	60	55	71
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	2.7
STL 2	*4mm toughened + 100mm air gap + 6.38mm laminated*	*19*	*25*	*33*	*42*	*50*	*50*	*49*	*53*	13.5
STL 3										
STL 4										
	Noise through Component 1	13	17	17	11	8	-2	-8	-15	21
	Noise through Component 2	36	36	31	25	22	19	16	6	40
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 1	**36**	**36**	**31**	**26**	**23**	**20**	**16**	**8**	**40**
	FAÇADE 2 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B4	50	56	59	62	67	64	60	55	71
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	10.8
STL 2										
STL 3										
STL 4										
	Noise through Component 1	19	23	23	17	14	4	-2	-9	27
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 2	**19**	**23**	**23**	**17**	**14**	**7**	**6**	**5**	**27**
	FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	36	36	31	26	23	20	16	8	40
Façade 2	19	23	23	17	14	7	6	5	27
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**36**	**37**	**32**	**26**	**23**	**20**	**17**	**11**	**40**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 4 m
Width= 6 m VOL= 64.8 m3

	63	125	250	500	1k	2k	4k	8k	A
Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
FAÇADE 1 (North) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B3	50	56	59	62	67	64	60	55	71
STL 1 *AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	2.7
STL 2 *4mm toughened + 100mm air gap + 6.38mm laminated*	*19*	*25*	*33*	*42*	*50*	*50*	*49*	*53*	13.5
STL 3									
STL 4									
Noise through Component 1	13	17	17	11	8	-2	-8	-15	21
Noise through Component 2	36	36	31	25	22	19	16	6	40
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**36**	**36**	**31**	**26**	**23**	**20**	**16**	**8**	**40**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	36	36	31	26	23	20	16	8	40
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**36**	**36**	**31**	**26**	**23**	**20**	**16**	**10**	**40**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 4 m
Width= 6 m VOL= 64.8 m3

		63	125	250	500	1k	2k	4k	8k	A
	Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
	FAÇADE 1 (North) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B1	50	56	59	62	67	65	60	55	71
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	2.7
STL 2	*4mm toughened + 100mm air gap + 6.38mm laminated*	*19*	*25*	*33*	*42*	*50*	*50*	*49*	*53*	13.5
STL 3										
STL 4										
	Noise through Component 1	13	17	17	11	8	-1	-8	-15	21
	Noise through Component 2	36	36	31	25	22	20	16	6	40
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 1	**36**	**36**	**31**	**26**	**23**	**21**	**16**	**8**	**40**
	FAÇADE 2 (east) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B19	42	48	50	54	58	56	51	45	62
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	10.8
STL 2										
STL 3										
STL 4										
	Noise through Component 1	11	15	14	9	5	-4	-11	-19	19
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 2	**12**	**15**	**14**	**10**	**8**	**5**	**5**	**5**	**19**
	FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	36	36	31	26	23	21	16	8	40
Façade 2	12	15	14	10	8	5	5	5	19
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**36**	**36**	**31**	**26**	**23**	**21**	**17**	**10**	**40**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job	2727
Client	C/o CMT Architects
Site	141 Waldron Road, Chester Hill
Room	Common Room

ROOM DATA

Height= 2.7 m Depth= 5 m

Width= 6 m VOL= 81.0 m3

		63	125	250	500	1k	2k	4k	8k	A
	Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
	FAÇADE 1 (North) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B5	46	53	55	59	63	61	57	51	67
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	2.7
STL 2										
STL 3										
STL 4										
	Noise through Component 1	8	13	12	7	3	-6	-12	-20	17
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 1	**10**	**14**	**13**	**9**	**7**	**5**	**5**	**5**	**17**
	FAÇADE 2 (south) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - B24	29	32	31	32	35	32	26	19	40
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	1.1
STL 2	*Timber 40mm Solid Core + Lorient IS7025 and IS8011si seals - door*	*23*	*27*	*33*	*32*	*29*	*35*	*40*	*44*	4.1
STL 3	*4mm annealed monolithic glass - window*	*16*	*21*	*22*	*29*	*33*	*35*	*31*	*36*	12.2
STL 4										
	Noise through Component 1	-13	-12	-16	-24	-29	-39	-47	-56	-8
	Noise through Component 2	5	4	-3	-1	5	-4	-15	-27	10
	Noise through Component 3	16	14	12	7	5	1	-2	-14	20
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 2	**17**	**15**	**13**	**8**	**9**	**4**	**2**	**0**	**20**
	FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	10	14	13	9	7	5	5	5	17
Façade 2	17	15	13	8	9	4	2	0	20
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**18**	**17**	**16**	**12**	**11**	**9**	**8**	**8**	**23**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 1

ROOM DATA
Height= 2.7 m Depth= 3.3 m
Width= 3 m VOL= 26.7 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (south) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - D16	40	48	51	52	55	54	45	30	60
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	1.9
STL 2 *4mm annealed monolithic glass - window*	16	21	22	29	33	35	31	36	6.8
STL 3									
STL 4									
Noise through Component 1	3	9	9	1	-4	-12	-24	-40	13
Noise through Component 2	28	30	32	27	25	22	17	-3	36
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**28**	**30**	**32**	**27**	**25**	**22**	**17**	**4**	**36**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	28	30	32	27	25	22	17	4	36
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**28**	**30**	**32**	**27**	**25**	**22**	**17**	**7**	**36**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 1

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 4.3 m VOL= 34.8 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (north) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - D28	36	42	44	46	50	47	41	32	54
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	5.4
STL 2 *4mm toughened glass - sliding door*	15	19	23	24	27	29	26	31	6.8
STL 3									
STL 4									
Noise through Component 1	2	6	5	-2	-6	-16	-24	-34	10
Noise through Component 2	23	25	23	24	25	20	17	3	32
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**23**	**25**	**23**	**24**	**25**	**20**	**17**	**6**	**32**
FAÇADE 2 (east) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - D17	35	43	46	49	53	51	45	37	57
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	8.1
STL 2									
STL 3									
STL 4									
Noise through Component 1	3	9	9	3	-1	-10	-18	-28	13
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**7**	**10**	**10**	**7**	**6**	**5**	**5**	**5**	**14**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	23	25	23	24	25	20	17	6	32
Façade 2	7	10	10	7	6	5	5	5	14
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**24**	**25**	**24**	**24**	**25**	**20**	**17**	**9**	**32**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 8 m
Width= 4.5 m VOL= 97.2 m3

		63	125	250	500	1k	2k	4k	8k	A
	Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
	FAÇADE 1 (north) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - D28	36	42	44	46	50	47	41	32	54
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	2.7
STL 2	*4mm toughened glass - sliding door*	*15*	*19*	*23*	*24*	*27*	*29*	*26*	*31*	9.5
STL 3										
STL 4										
	Noise through Component 1	-3	1	0	-7	-11	-21	-29	-40	5
	Noise through Component 2	23	25	23	24	25	20	17	2	31
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 1	**23**	**25**	**23**	**24**	**25**	**20**	**17**	**5**	**31**
	FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	23	25	23	24	25	20	17	5	31
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**23**	**25**	**23**	**24**	**25**	**20**	**17**	**8**	**31**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 1

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (south) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - D14	40	48	51	52	56	54	46	30	60
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	8.1
STL 2 *4mm annealed monolithic glass - window*	16	21	22	29	33	35	31	36	1.9
STL 3									
STL 4									
Noise through Component 1	10	15	16	7	3	-6	-16	-33	19
Noise through Component 2	22	25	27	21	21	17	13	-8	31
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**23**	**25**	**27**	**22**	**21**	**17**	**13**	**3**	**31**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	23	25	27	22	21	17	13	3	31
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**23**	**25**	**27**	**22**	**21**	**17**	**14**	**7**	**31**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 2

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (north) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - D26	34	39	41	44	48	45	39	30	52
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	1.1
STL 2 *4mm toughened glass - sliding door*	15	19	23	24	27	29	26	31	8.1
STL 3									
STL 4									
Noise through Component 1	-5	-2	-3	-9	-13	-23	-32	-42	2
Noise through Component 2	24	24	23	24	25	20	17	3	32
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**24**	**24**	**23**	**24**	**25**	**20**	**17**	**6**	**32**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	24	24	23	24	25	20	17	6	32
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**24**	**24**	**23**	**24**	**25**	**20**	**18**	**8**	**32**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 9 m
Width= 4 m VOL= 97.2 m3

	63	125	250	500	1k	2k	4k	8k	A
Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
FAÇADE 1 (north) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - D26	34	39	41	44	48	45	39	30	52
STL 1 *AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	2.7
STL 2 *4mm toughened glass - sliding door*	*15*	*19*	*23*	*24*	*27*	*29*	*26*	*31*	9.5
STL 3									
STL 4									
Noise through Component 1	-5	-2	-3	-9	-13	-23	-31	-42	2
Noise through Component 2	21	22	20	22	23	18	15	0	29
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**21**	**22**	**20**	**22**	**23**	**18**	**15**	**5**	**29**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	21	22	20	22	23	18	15	5	29
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**21**	**22**	**20**	**22**	**23**	**18**	**15**	**8**	**29**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 1

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	*0.4*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.33*
FAÇADE 1 (south) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - D12	40	48	52	52	56	54	46	30	60
STL 1 *AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	8.1
STL 2 *4mm annealed monolithic glass - window*	*16*	*21*	*22*	*29*	*33*	*35*	*31*	*36*	1.9
STL 3									
STL 4									
Noise through Component 1	10	15	17	7	3	-6	-16	-33	20
Noise through Component 2	22	25	28	21	21	17	13	-8	31
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**23**	**25**	**28**	**22**	**21**	**17**	**13**	**3**	**32**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	23	25	28	22	21	17	13	3	32
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**23**	**25**	**28**	**22**	**21**	**17**	**14**	**7**	**32**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 2

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	*0.4*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.33*
FAÇADE 1 (north) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - D25	36	41	42	44	47	44	37	28	52
STL 1 *AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	1.1
STL 2 *4mm toughened glass - sliding door*	*15*	*19*	*23*	*24*	*27*	*29*	*26*	*31*	8.1
STL 3									
STL 4									
Noise through Component 1	-3	0	-2	-9	-14	-24	-34	-44	3
Noise through Component 2	26	26	24	24	24	19	15	1	32
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**26**	**26**	**24**	**24**	**24**	**19**	**15**	**5**	**32**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	26	26	24	24	24	19	15	5	32
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**26**	**26**	**24**	**24**	**24**	**20**	**16**	**8**	**32**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 9 m
Width= 4 m VOL= 97.2 m3

	63	125	250	500	1k	2k	4k	8k	A
Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
FAÇADE 1 (north) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - D25	36	41	42	44	47	44	37	28	52
STL 1 *AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	2.7
STL 2 *4mm toughened glass - sliding door*	*15*	*19*	*23*	*24*	*27*	*29*	*26*	*31*	9.5
STL 3									
STL 4									
Noise through Component 1	-3	0	-2	-9	-14	-24	-33	-44	4
Noise through Component 2	23	24	21	22	22	17	13	-2	29
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**23**	**24**	**21**	**22**	**22**	**17**	**13**	**4**	**29**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	23	24	21	22	22	17	13	4	29
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**23**	**24**	**21**	**22**	**22**	**17**	**14**	**7**	**30**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 1

ROOM DATA
Height= 2.7 m Depth= 3.5 m
Width= 3.5 m VOL= 33.1 m3

		63	125	250	500	1k	2k	4k	8k	A
	Bedroom, carpet floor, furnished (RT60, sec)	*0.4*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.33*
	FAÇADE 1 (east) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - D11	37	45	49	50	53	51	43	27	57
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	4.1
STL 2	*4mm annealed monolithic - window*	*16*	*21*	*22*	*29*	*33*	*35*	*31*	*36*	5.4
STL 3										
STL 4										
	Noise through Component 1	2	8	9	1	-4	-13	-23	-40	13
	Noise through Component 2	23	25	28	23	21	17	13	-8	32
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 1	**23**	**25**	**28**	**23**	**21**	**17**	**13**	**3**	**32**
	FAÇADE 2 (south) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - D11	37	45	49	50	53	51	43	27	57
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	9.5
STL 2										
STL 3										
STL 4										
	Noise through Component 1	6	12	13	5	0	-9	-19	-37	16
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 2	**8**	**12**	**13**	**8**	**6**	**5**	**5**	**5**	**17**
	FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	23	25	28	23	21	17	13	3	32
Façade 2	8	12	13	8	6	5	5	5	17
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**23**	**25**	**28**	**23**	**21**	**18**	**14**	**9**	**32**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 5.5 m
Width= 7 m VOL= 104.0 m3

		63	125	250	500	1k	2k	4k	8k	A
	Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
	FAÇADE 1 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - D10	41	48	51	52	57	54	48	38	61
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	2.7
STL 2	*4mm toughened glass - sliding door*	*15*	*19*	*23*	*24*	*27*	*29*	*26*	*31*	12.2
STL 3										
STL 4										
	Noise through Component 1	2	7	7	-1	-4	-14	-22	-34	11
	Noise through Component 2	28	31	30	30	32	27	24	9	38
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 1	**28**	**31**	**30**	**30**	**32**	**27**	**24**	**10**	**38**
	FAÇADE 2 (south) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - D11	37	45	49	50	53	51	43	27	57
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	18.9
STL 2										
STL 3										
STL 4										
	Noise through Component 1	6	12	13	5	0	-9	-19	-36	17
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 2	**9**	**13**	**14**	**8**	**6**	**5**	**5**	**5**	**17**
	FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	28	31	30	30	32	27	24	10	38
Façade 2	9	13	14	8	6	5	5	5	17
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**28**	**31**	**31**	**30**	**32**	**27**	**25**	**12**	**38**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 2

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - D8	42	48	51	53	58	55	50	42	62
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	1.1
STL 2 *6.38mm laminated glass - sliding door*	17	24	29	31	36	33	38	41	8.1
STL 3									
STL 4									
Noise through Component 1	3	7	7	0	-3	-13	-21	-30	11
Noise through Component 2	30	28	27	26	26	26	16	5	35
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**30**	**28**	**27**	**26**	**26**	**26**	**16**	**7**	**35**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	30	28	27	26	26	26	16	7	35
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**30**	**28**	**27**	**26**	**26**	**26**	**17**	**9**	**35**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 2

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	*0.4*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.33*
FAÇADE 1 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - D8	39	45	48	50	55	52	47	39	59
STL 1 *AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	1.1
STL 2 *6.38mm laminated glass - sliding door*	*17*	*24*	*29*	*31*	*36*	*33*	*38*	*41*	8.1
STL 3									
STL 4									
Noise through Component 1	0	4	4	-3	-6	-16	-24	-33	8
Noise through Component 2	27	25	24	23	23	23	13	2	32
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**27**	**25**	**24**	**23**	**23**	**23**	**14**	**6**	**32**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	27	25	24	23	23	23	14	6	32
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**27**	**25**	**24**	**23**	**24**	**23**	**14**	**8**	**32**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 4.5 m
Width= 9 m VOL= 109.4 m3

	63	125	250	500	1k	2k	4k	8k	A
Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
FAÇADE 1 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - D8	42	48	51	53	58	55	50	42	62
STL 1 *AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	1.4
STL 2 *4mm toughened glass - sliding door*	*15*	*19*	*23*	*24*	*27*	*29*	*26*	*31*	10.8
STL 3									
STL 4									
Noise through Component 1	0	4	4	-3	-6	-16	-23	-33	8
Noise through Component 2	29	31	30	31	33	28	26	12	38
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**29**	**31**	**30**	**31**	**33**	**28**	**26**	**12**	**38**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	29	31	30	31	33	28	26	12	38
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**29**	**31**	**30**	**31**	**33**	**28**	**26**	**13**	**38**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 2

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - D6	45	52	54	57	61	59	54	48	65
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	1.1
STL 2 *10.38mm laminated glass - sliding door*	22	26	31	35	35	35	42	48	8.1
STL 3									
STL 4									
Noise through Component 1	6	11	10	4	0	-9	-17	-24	14
Noise through Component 2	28	31	28	27	31	28	16	4	37
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**28**	**31**	**28**	**27**	**31**	**28**	**16**	**6**	**37**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	28	31	28	27	31	28	16	6	37
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**28**	**31**	**28**	**27**	**31**	**28**	**17**	**9**	**37**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 2

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - D6	42	49	51	54	58	56	51	45	62
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	1.1
STL 2 *10.38mm laminated glass - sliding door*	22	26	31	35	35	35	42	48	8.1
STL 3									
STL 4									
Noise through Component 1	3	8	7	1	-3	-12	-20	-27	11
Noise through Component 2	25	28	25	24	28	25	13	1	34
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**25**	**28**	**25**	**24**	**28**	**25**	**13**	**5**	**34**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	25	28	25	24	28	25	13	5	34
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**25**	**28**	**25**	**24**	**28**	**25**	**14**	**8**	**34**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 4.5 m
Width= 9 m VOL= 109.4 m3

	63	125	250	500	1k	2k	4k	8k	A
Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
FAÇADE 1 (North) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - D5	45	52	54	57	62	60	55	50	66
STL 1 *AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	8.1
STL 2 *10.38mm laminated glass - sliding doors*	*22*	*26*	*31*	*35*	*35*	*35*	*42*	*48*	18.9
STL 3 *6.38mm laminated glass - window*	*17*	*24*	*29*	*31*	*36*	*33*	*38*	*41*	5.4
STL 4									
Noise through Component 1	10	15	14	8	5	-4	-11	-17	19
Noise through Component 2	27	31	27	26	31	29	17	5	37
Noise through Component 3	27	27	24	25	25	26	16	7	33
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**30**	**32**	**29**	**29**	**32**	**31**	**19**	**10**	**39**
FAÇADE 2 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - D6	45	52	54	57	61	59	54	48	65
STL 1 *AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	1.4
STL 2 *10.38mm laminated glass - sliding doors*	*22*	*26*	*31*	*35*	*35*	*35*	*42*	*48*	10.8
STL 3									
STL 4									
Noise through Component 1	3	8	7	1	-3	-12	-19	-27	11
Noise through Component 2	25	28	25	24	28	26	13	1	34
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**25**	**28**	**25**	**24**	**28**	**26**	**14**	**5**	**34**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	30	32	29	29	32	31	19	10	39
Façade 2	25	28	25	24	28	26	14	5	34
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**31**	**34**	**30**	**30**	**34**	**32**	**21**	**12**	**40**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 4 m
Width= 6 m VOL= 64.8 m3

		63	125	250	500	1k	2k	4k	8k	A
	Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
	FAÇADE 1 (North) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - D4	48	55	57	61	65	63	59	53	69
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	2.7
STL 2	*4mm toughened + 100mm air gap + 6.38mm laminated*	*19*	*25*	*33*	*42*	*50*	*50*	*49*	*53*	13.5
STL 3										
STL 4										
	Noise through Component 1	11	16	15	10	6	-3	-9	-17	20
	Noise through Component 2	34	35	29	24	20	18	15	4	39
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 1	**34**	**35**	**29**	**25**	**21**	**19**	**15**	**7**	**39**
	FAÇADE 2 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - D4	48	55	57	61	65	63	59	53	69
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	10.8
STL 2										
STL 3										
STL 4										
	Noise through Component 1	17	22	21	16	12	3	-3	-11	26
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 2	**17**	**22**	**21**	**16**	**13**	**7**	**5**	**5**	**26**
	FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	34	35	29	25	21	19	15	7	39
Façade 2	17	22	21	16	13	7	5	5	26
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**34**	**36**	**30**	**25**	**21**	**19**	**16**	**10**	**39**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 4 m
Width= 6 m VOL= 64.8 m3

	63	125	250	500	1k	2k	4k	8k	A
Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
FAÇADE 1 (North) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - D1	49	55	58	61	66	64	59	54	70
STL 1 *AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	2.7
STL 2 *4mm toughened + 100mm air gap + 6.38mm laminated*	*19*	*25*	*33*	*42*	*50*	*50*	*49*	*53*	13.5
STL 3									
STL 4									
Noise through Component 1	12	16	16	10	7	-2	-9	-16	20
Noise through Component 2	35	35	30	24	21	19	15	5	39
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**35**	**35**	**30**	**25**	**22**	**20**	**15**	**7**	**39**
FAÇADE 2 (east) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - D18	41	48	50	54	58	56	51	45	62
STL 1 *AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	10.8
STL 2									
STL 3									
STL 4									
Noise through Component 1	10	15	14	9	5	-4	-11	-19	19
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**11**	**15**	**14**	**10**	**8**	**5**	**5**	**5**	**19**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	35	35	30	25	22	20	15	7	39
Façade 2	11	15	14	10	8	5	5	5	19
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**35**	**35**	**30**	**25**	**22**	**20**	**16**	**10**	**39**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 4 m
Width= 6 m VOL= 64.8 m3

		63	125	250	500	1k	2k	4k	8k	A
	Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
	FAÇADE 1 (North) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - E1	48	55	57	60	65	63	58	53	69
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	2.7
STL 2	*4mm toughened + 100mm air gap + 6.38mm laminated*	*19*	*25*	*33*	*42*	*50*	*50*	*49*	*53*	13.5
STL 3										
STL 4										
	Noise through Component 1	11	16	15	9	6	-3	-10	-17	20
	Noise through Component 2	34	35	29	23	20	18	14	4	39
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 1	**34**	**35**	**29**	**24**	**21**	**19**	**14**	**7**	**39**
	FAÇADE 2 (east) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - E18	41	47	50	53	58	55	51	44	62
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	10.8
STL 2										
STL 3										
STL 4										
	Noise through Component 1	10	14	14	8	5	-5	-11	-20	18
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 2	**11**	**14**	**14**	**10**	**8**	**5**	**5**	**5**	**19**
	FAÇADE 3 (roof) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - R1	35	40	41	42	44	39	32	24	49
STL 1	*200 mm thick concrete ceiling/roof (11m2)*	*44*	*44*	*47*	*54*	*62*	*67*	*72*	*77*	24.0
STL 2										
STL 3										
STL 4										
	Noise through Component 1	-2	3	1	-5	-11	-21	-33	-46	7
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 3	**6**	**7**	**6**	**5**	**5**	**5**	**5**	**5**	**9**
	FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	34	35	29	24	21	19	14	7	39
Façade 2	11	14	14	10	8	5	5	5	19
Façade 3	6	7	6	5	5	5	5	5	9
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**34**	**35**	**29**	**24**	**21**	**19**	**15**	**11**	**39**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 1

ROOM DATA
Height= 2.7 m Depth= 3.3 m
Width= 3 m VOL= 26.7 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (south) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - F12	40	48	51	52	55	53	45	29	60
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	1.9
STL 2 *4mm annealed monolithic glass - window*	16	21	22	29	33	35	31	36	6.8
STL 3									
STL 4									
Noise through Component 1	3	9	9	1	-4	-13	-24	-41	13
Noise through Component 2	28	30	32	27	25	21	17	-4	36
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**28**	**30**	**32**	**27**	**25**	**21**	**17**	**4**	**36**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	28	30	32	27	25	21	17	4	36
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**28**	**30**	**32**	**27**	**25**	**21**	**17**	**7**	**36**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 1

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 4.3 m VOL= 34.8 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (north) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - F14	36	42	44	46	50	48	42	32	54
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	5.4
STL 2 *4mm toughened glass - sliding door*	15	19	23	24	27	29	26	31	6.8
STL 3									
STL 4									
Noise through Component 1	2	6	5	-2	-6	-15	-23	-34	10
Noise through Component 2	23	25	23	24	25	21	18	3	32
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**23**	**25**	**23**	**24**	**25**	**21**	**18**	**6**	**32**
FAÇADE 2 (east) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - F13	36	43	46	49	53	51	45	36	57
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	8.1
STL 2									
STL 3									
STL 4									
Noise through Component 1	4	9	9	3	-1	-10	-18	-29	13
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**8**	**10**	**10**	**7**	**6**	**5**	**5**	**5**	**14**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	23	25	23	24	25	21	18	6	32
Façade 2	8	10	10	7	6	5	5	5	14
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**24**	**25**	**24**	**24**	**25**	**21**	**18**	**9**	**32**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 8 m
Width= 4.5 m VOL= 97.2 m3

	63	125	250	500	1k	2k	4k	8k	A
Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
FAÇADE 1 (north) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - F14	36	42	44	46	50	48	42	32	54
STL 1 *AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	2.7
STL 2 *4mm toughened glass - sliding door*	*15*	*19*	*23*	*24*	*27*	*29*	*26*	*31*	9.5
STL 3									
STL 4									
Noise through Component 1	-3	1	0	-7	-11	-20	-28	-40	5
Noise through Component 2	23	25	23	24	25	21	18	2	31
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**23**	**25**	**23**	**24**	**25**	**21**	**18**	**5**	**31**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	23	25	23	24	25	21	18	5	31
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**23**	**25**	**23**	**24**	**25**	**21**	**18**	**8**	**31**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 2

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	*0.4*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.33*
FAÇADE 1 (north) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) -F16	35	40	41	43	46	42	35	24	50
STL 1 *AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	1.1
STL 2 *4mm toughened glass - sliding door*	*15*	*19*	*23*	*24*	*27*	*29*	*26*	*31*	8.1
STL 3									
STL 4									
Noise through Component 1	-4	-1	-3	-10	-15	-26	-36	-48	2
Noise through Component 2	25	25	23	23	23	17	13	-3	31
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**25**	**25**	**23**	**23**	**23**	**17**	**14**	**4**	**31**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	25	25	23	23	23	17	14	4	31
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**25**	**25**	**23**	**23**	**24**	**18**	**14**	**7**	**31**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 9 m
Width= 4 m VOL= 97.2 m3

	63	125	250	500	1k	2k	4k	8k	A
Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
FAÇADE 1 (north) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - F16	35	40	41	43	46	42	35	24	50
STL 1 *AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	2.7
STL 2 *4mm toughened glass - sliding door*	*15*	*19*	*23*	*24*	*27*	*29*	*26*	*31*	9.5
STL 3									
STL 4									
Noise through Component 1	-4	-1	-3	-10	-15	-26	-35	-48	3
Noise through Component 2	22	23	20	21	21	15	11	-6	28
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**22**	**23**	**20**	**21**	**21**	**15**	**11**	**4**	**28**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	22	23	20	21	21	15	11	4	28
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**22**	**23**	**20**	**21**	**21**	**15**	**12**	**7**	**29**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 1

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (south) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - F8	39	48	51	52	55	53	45	29	60
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	8.1
STL 2 *4mm annealed monolithic glass - window*	16	21	22	29	33	35	31	36	1.9
STL 3									
STL 4									
Noise through Component 1	9	15	16	7	2	-7	-17	-34	19
Noise through Component 2	21	25	27	21	20	16	12	-9	31
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**22**	**25**	**27**	**22**	**20**	**16**	**12**	**3**	**31**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	22	25	27	22	20	16	12	3	31
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**22**	**25**	**27**	**22**	**20**	**17**	**13**	**7**	**31**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 2

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	*0.4*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.33*
FAÇADE 1 (north) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - F17	37	42	44	46	50	48	42	34	54
STL 1 *AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	1.1
STL 2 *4mm toughened glass - sliding door*	*15*	*19*	*23*	*24*	*27*	*29*	*26*	*31*	8.1
STL 3									
STL 4									
Noise through Component 1	-2	1	0	-7	-11	-20	-29	-38	5
Noise through Component 2	27	27	26	26	27	23	20	7	34
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**27**	**27**	**26**	**26**	**27**	**23**	**20**	**8**	**34**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	27	27	26	26	27	23	20	8	34
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**27**	**27**	**26**	**26**	**27**	**23**	**20**	**10**	**34**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 9 m
Width= 4 m VOL= 97.2 m3

		63	125	250	500	1k	2k	4k	8k	A
	Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
	FAÇADE 1 (north) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - F17	37	42	44	46	50	48	42	34	54
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	2.7
STL 2	*4mm toughened glass - sliding door*	*15*	*19*	*23*	*24*	*27*	*29*	*26*	*31*	9.5
STL 3										
STL 4										
	Noise through Component 1	-2	1	0	-7	-11	-20	-28	-38	5
	Noise through Component 2	24	25	23	24	25	21	18	4	31
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 1	**24**	**25**	**23**	**24**	**25**	**21**	**18**	**6**	**31**
	FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	24	25	23	24	25	21	18	6	31
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**24**	**25**	**23**	**24**	**25**	**21**	**18**	**9**	**32**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 1

ROOM DATA
Height= 2.7 m Depth= 3.5 m
Width= 3.5 m VOL= 33.1 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (east) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - F7	37	45	48	49	52	51	42	26	57
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	4.1
STL 2 *4mm annealed monolithic - window*	16	21	22	29	33	35	31	36	5.4
STL 3									
STL 4									
Noise through Component 1	2	8	8	0	-5	-13	-24	-41	12
Noise through Component 2	23	25	27	22	20	17	12	-9	31
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**23**	**25**	**27**	**22**	**20**	**17**	**12**	**3**	**31**
FAÇADE 2 (south) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - F7	37	45	48	49	52	51	42	26	57
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	9.5
STL 2									
STL 3									
STL 4									
Noise through Component 1	6	12	12	4	-1	-9	-20	-38	16
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**8**	**12**	**13**	**7**	**6**	**5**	**5**	**5**	**16**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	23	25	27	22	20	17	12	3	31
Façade 2	8	12	13	7	6	5	5	5	16
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**23**	**25**	**27**	**22**	**20**	**18**	**13**	**9**	**32**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 5.5 m
Width= 7 m VOL= 104.0 m3

		63	125	250	500	1k	2k	4k	8k	A
	Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
	FAÇADE 1 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - F6	40	47	50	52	56	54	48	38	60
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	2.7
STL 2	*4mm toughened glass - sliding door*	*15*	*19*	*23*	*24*	*27*	*29*	*26*	*31*	12.2
STL 3										
STL 4										
	Noise through Component 1	1	6	6	-1	-5	-14	-22	-34	10
	Noise through Component 2	27	30	29	30	31	27	24	9	38
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 1	**27**	**30**	**29**	**30**	**31**	**27**	**24**	**10**	**38**
	FAÇADE 2 (south) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - F7	37	45	48	49	52	51	42	26	57
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	18.9
STL 2										
STL 3										
STL 4										
	Noise through Component 1	6	12	12	4	-1	-9	-20	-37	16
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 2	**9**	**13**	**13**	**8**	**6**	**5**	**5**	**5**	**17**
	FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	27	30	29	30	31	27	24	10	38
Façade 2	9	13	13	8	6	5	5	5	17
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**27**	**31**	**30**	**30**	**31**	**27**	**25**	**12**	**38**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 2

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - F4	41	48	50	53	57	55	49	42	61
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	1.1
STL 2 *6.38mm laminated glass - sliding door*	17	24	29	31	36	33	38	41	8.1
STL 3									
STL 4									
Noise through Component 1	2	7	6	0	-4	-13	-22	-30	10
Noise through Component 2	29	28	26	26	25	26	15	5	35
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**29**	**28**	**26**	**26**	**25**	**26**	**15**	**7**	**35**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	29	28	26	26	25	26	15	7	35
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**29**	**28**	**26**	**26**	**25**	**26**	**16**	**9**	**35**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 2

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - F4	38	45	47	50	54	52	46	39	58
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	1.1
STL 2 *6.38mm laminated glass - sliding door*	17	24	29	31	36	33	38	41	8.1
STL 3									
STL 4									
Noise through Component 1	-1	4	3	-3	-7	-16	-25	-33	7
Noise through Component 2	26	25	23	23	22	23	12	2	32
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**26**	**25**	**23**	**23**	**22**	**23**	**13**	**6**	**32**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	26	25	23	23	22	23	13	6	32
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**26**	**25**	**23**	**23**	**23**	**23**	**13**	**8**	**32**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 4.5 m
Width= 9 m VOL= 109.4 m3

	63	125	250	500	1k	2k	4k	8k	A
Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
FAÇADE 1 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - F4	41	48	50	53	57	55	49	42	61
STL 1 *AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	1.4
STL 2 *4mm toughened glass - sliding door*	*15*	*19*	*23*	*24*	*27*	*29*	*26*	*31*	10.8
STL 3									
STL 4									
Noise through Component 1	-1	4	3	-3	-7	-16	-24	-33	7
Noise through Component 2	28	31	29	31	32	28	25	12	38
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**28**	**31**	**29**	**31**	**32**	**28**	**25**	**12**	**38**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	28	31	29	31	32	28	25	12	38
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**28**	**31**	**29**	**31**	**32**	**28**	**25**	**13**	**38**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 2

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - F2	44	50	53	55	60	57	52	46	64
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	1.1
STL 2 *6.38mm laminated glass - sliding door*	17	24	29	31	36	33	38	41	8.1
STL 3									
STL 4									
Noise through Component 1	5	9	9	2	-1	-11	-19	-26	13
Noise through Component 2	32	30	29	28	28	28	18	9	37
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**32**	**30**	**29**	**28**	**28**	**28**	**18**	**10**	**37**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	32	30	29	28	28	28	18	10	37
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**32**	**30**	**29**	**28**	**28**	**28**	**19**	**11**	**37**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 2

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - F2	41	47	50	52	57	54	49	43	61
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	1.1
STL 2 *6.38mm laminated glass - sliding door*	17	24	29	31	36	33	38	41	8.1
STL 3									
STL 4									
Noise through Component 1	2	6	6	-1	-4	-14	-22	-29	10
Noise through Component 2	29	27	26	25	25	25	15	6	34
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**29**	**27**	**26**	**25**	**25**	**25**	**15**	**8**	**34**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	29	27	26	25	25	25	15	8	34
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**29**	**27**	**26**	**25**	**25**	**25**	**16**	**10**	**34**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 4.5 m
Width= 9 m VOL= 109.4 m3

		63	125	250	500	1k	2k	4k	8k	A
	Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
	FAÇADE 1 (North) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - F1	47	53	55	59	63	61	56	50	67
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	8.1
STL 2	*10.38mm laminated glass - sliding door*	*22*	*26*	*31*	*35*	*35*	*35*	*42*	*48*	9.5
STL 3	*10.38mm laminated glass - window*	*22*	*26*	*31*	*35*	*35*	*35*	*42*	*48*	5.4
STL 4	*10.38mm laminated glass - sliding door*	*22*	*26*	*31*	*35*	*35*	*35*	*42*	*48*	9.5
	Noise through Component 1	12	16	15	10	6	-3	-10	-17	20
	Noise through Component 2	26	29	25	25	29	27	15	2	35
	Noise through Component 3	24	26	23	23	27	25	12	0	33
	Noise through Component 4	26	29	25	25	29	27	15	2	35
	NOISE THROUGH FAÇADE 1	**31**	**33**	**29**	**30**	**33**	**31**	**19**	**6**	**39**
	FAÇADE 2 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - F2	44	50	53	55	60	57	52	46	64
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	1.4
STL 2	*10.38mm laminated glass - sliding door*	*22*	*26*	*31*	*35*	*35*	*35*	*42*	*48*	10.8
STL 3										
STL 4										
	Noise through Component 1	2	6	6	-1	-4	-14	-21	-29	10
	Noise through Component 2	24	26	24	22	27	24	11	-1	33
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 2	**24**	**26**	**24**	**22**	**27**	**24**	**12**	**4**	**33**
	FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	31	33	29	30	33	31	19	6	39
Façade 2	24	26	24	22	27	24	12	4	33
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**31**	**34**	**30**	**30**	**34**	**32**	**20**	**10**	**40**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 1

ROOM DATA
Height= 2.7 m Depth= 3.3 m
Width= 3 m VOL= 26.7 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (south) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - H12	39	47	50	51	54	53	44	28	59
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	1.9
STL 2 *4mm annealed monolithic glass - window*	16	21	22	29	33	35	31	36	6.8
STL 3									
STL 4									
Noise through Component 1	2	8	8	0	-5	-13	-25	-42	12
Noise through Component 2	27	29	31	26	24	21	16	-5	35
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**27**	**29**	**31**	**26**	**24**	**21**	**16**	**4**	**35**
FAÇADE 2 (roof) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - R12	30	36	38	39	42	39	33	23	47
STL 1 *200 mm thick concrete ceiling/roof (11m2)*	44	44	47	54	62	67	72	77	9.9
STL 2									
STL 3									
STL 4									
Noise through Component 1	-9	-3	-4	-10	-15	-23	-34	-50	1
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**6**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	27	29	31	26	24	21	16	4	35
Façade 2	5	5	5	5	5	5	5	5	6
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**27**	**29**	**31**	**26**	**24**	**21**	**16**	**9**	**35**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 1

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 4.3 m VOL= 34.8 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (north) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - H14	38	44	47	50	54	52	46	37	58
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	5.4
STL 2 *4mm toughened glass - sliding door*	15	19	23	24	27	29	26	31	6.8
STL 3									
STL 4									
Noise through Component 1	4	8	8	2	-2	-11	-19	-29	13
Noise through Component 2	25	27	26	28	29	25	22	8	35
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**25**	**27**	**26**	**28**	**29**	**25**	**22**	**9**	**35**
FAÇADE 2 (east) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - H13	35	43	46	49	53	50	44	36	57
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	8.1
STL 2									
STL 3									
STL 4									
Noise through Component 1	3	9	9	3	-1	-11	-19	-29	13
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**7**	**10**	**10**	**7**	**6**	**5**	**5**	**5**	**14**
FAÇADE 3 (roof) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - R12	30	36	38	39	42	39	33	23	47
STL 1 *200 mm thick concrete ceiling/roof (11m2)*	44	44	47	54	62	67	72	77	12.9
STL 2									
STL 3									
STL 4									
Noise through Component 1	-9	-3	-4	-10	-15	-23	-34	-50	1
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**6**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	25	27	26	28	29	25	22	9	35
Façade 2	7	10	10	7	6	5	5	5	14
Façade 3	5	5	5	5	5	5	5	5	6
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**26**	**27**	**26**	**28**	**29**	**25**	**22**	**12**	**35**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job	2727
Client	C/o CMT Architects
Site	141 Waldron Road, Chester Hill
Room	Kitchen/Dining/Living

ROOM DATA

Height= 2.7 m Depth= 8 m

Width= 4.5 m VOL= 97.2 m3

		63	125	250	500	1k	2k	4k	8k	A
	Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
	FAÇADE 1 (north) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - H14	38	44	47	50	54	52	46	37	58
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	2.7
STL 2	*4mm toughened glass - sliding door*	*15*	*19*	*23*	*24*	*27*	*29*	*26*	*31*	9.5
STL 3										
STL 4										
	Noise through Component 1	-1	3	3	-3	-7	-16	-24	-35	8
	Noise through Component 2	25	27	26	28	29	25	22	7	35
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 1	**25**	**27**	**26**	**28**	**29**	**25**	**22**	**8**	**35**
	FAÇADE 2 (roof) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - R12	30	36	38	39	42	39	33	23	47
STL 1	*200 mm thick concrete ceiling/roof (11m2)*	*44*	*44*	*47*	*54*	*62*	*67*	*72*	*77*	36.0
STL 2										
STL 3										
STL 4										
	Noise through Component 1	-7	-1	-2	-8	-13	-21	-32	-47	3
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 2	**5**	**6**	**6**	**5**	**5**	**5**	**5**	**5**	**7**
	FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	25	27	26	28	29	25	22	8	35
Façade 2	5	6	6	5	5	5	5	5	7
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**25**	**27**	**26**	**28**	**29**	**25**	**22**	**11**	**35**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 2

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (north) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) -H16	36	42	44	46	50	47	41	30	54
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	1.1
STL 2 *4mm toughened glass - sliding door*	15	19	23	24	27	29	26	31	8.1
STL 3									
STL 4									
Noise through Component 1	-3	1	0	-7	-11	-21	-30	-42	5
Noise through Component 2	26	27	26	26	27	22	19	3	34
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**26**	**27**	**26**	**26**	**27**	**22**	**19**	**6**	**34**
FAÇADE 2 (roof) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - R10	30	34	37	37	40	37	30	21	45
STL 1 *200 mm thick concrete ceiling/roof (11m2)*	44	44	47	54	62	67	72	77	9.0
STL 2									
STL 3									
STL 4									
Noise through Component 1	-9	-5	-5	-12	-17	-25	-37	-52	-1
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**6**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	26	27	26	26	27	22	19	6	34
Façade 2	5	5	5	5	5	5	5	5	6
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**26**	**27**	**26**	**26**	**27**	**22**	**20**	**10**	**34**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job	2727
Client	C/o CMT Architects
Site	141 Waldron Road, Chester Hill
Room	Kitchen/Dining/Living

ROOM DATA

Height= 2.7 m Depth= 9 m

Width= 4 m VOL= 97.2 m3

		63	125	250	500	1k	2k	4k	8k	A
	Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
	FAÇADE 1 (north) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - H16	36	42	44	46	50	47	41	30	54
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	2.7
STL 2	*4mm toughened glass - sliding door*	*15*	*19*	*23*	*24*	*27*	*29*	*26*	*31*	9.5
STL 3										
STL 4										
	Noise through Component 1	-3	1	0	-7	-11	-21	-29	-42	5
	Noise through Component 2	23	25	23	24	25	20	17	0	31
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 1	**23**	**25**	**23**	**24**	**25**	**20**	**17**	**5**	**31**
	FAÇADE 2 (roof) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - R10	30	34	37	37	40	37	30	21	45
STL 1	*200 mm thick concrete ceiling/roof (11m2)*	*44*	*44*	*47*	*54*	*62*	*67*	*72*	*77*	36.0
STL 2										
STL 3										
STL 4										
	Noise through Component 1	-7	-3	-3	-10	-15	-23	-35	-49	2
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 2	**5**	**6**	**6**	**5**	**5**	**5**	**5**	**5**	**7**
	FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS

Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	23	25	23	24	25	20	17	5	31
Façade 2	5	6	6	5	5	5	5	5	7
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**23**	**25**	**23**	**24**	**25**	**20**	**17**	**9**	**31**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 1

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (south) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - H8	39	47	50	51	54	53	44	28	59
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	8.1
STL 2 *4mm annealed monolithic glass - window*	16	21	22	29	33	35	31	36	1.9
STL 3									
STL 4									
Noise through Component 1	9	14	15	6	1	-7	-18	-35	18
Noise through Component 2	21	24	26	20	19	16	11	-10	30
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**22**	**24**	**26**	**21**	**19**	**16**	**11**	**3**	**30**
FAÇADE 2 (roof) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - R9	30	35	36	36	38	34	26	15	43
STL 1 *200 mm thick concrete ceiling/roof (11m2)*	44	44	47	54	62	67	72	77	9.0
STL 2									
STL 3									
STL 4									
Noise through Component 1	-9	-4	-6	-13	-19	-28	-41	-58	-1
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**6**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	22	24	26	21	19	16	11	3	30
Façade 2	5	5	5	5	5	5	5	5	6
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**22**	**24**	**26**	**21**	**19**	**17**	**13**	**9**	**30**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 2

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (north) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - H17	37	43	46	49	52	50	44	36	56
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	1.1
STL 2 *4mm toughened glass - sliding door*	15	19	23	24	27	29	26	31	8.1
STL 3									
STL 4									
Noise through Component 1	-2	2	2	-4	-9	-18	-27	-36	6
Noise through Component 2	27	28	28	29	29	25	22	9	36
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**27**	**28**	**28**	**29**	**29**	**25**	**22**	**10**	**36**
FAÇADE 2 (roof) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - R9	30	35	36	36	38	34	26	15	43
STL 1 *200 mm thick concrete ceiling/roof (11m2)*	44	44	47	54	62	67	72	77	9.0
STL 2									
STL 3									
STL 4									
Noise through Component 1	-9	-4	-6	-13	-19	-28	-41	-58	-1
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**6**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	27	28	28	29	29	25	22	10	36
Façade 2	5	5	5	5	5	5	5	5	6
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**27**	**28**	**28**	**29**	**29**	**25**	**22**	**12**	**36**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 9 m
Width= 4 m VOL= 97.2 m3

	63	125	250	500	1k	2k	4k	8k	A
Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
FAÇADE 1 (north) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - H17	37	43	46	49	52	50	44	36	56
STL 1 *AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	2.7
STL 2 *4mm toughened glass - sliding door*	*15*	*19*	*23*	*24*	*27*	*29*	*26*	*31*	9.5
STL 3									
STL 4									
Noise through Component 1	-2	2	2	-4	-9	-18	-26	-36	7
Noise through Component 2	24	26	25	27	27	23	20	6	33
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**24**	**26**	**25**	**27**	**27**	**23**	**20**	**8**	**33**
FAÇADE 2 (roof) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - R9	30	35	36	36	38	34	26	15	43
STL 1 *200 mm thick concrete ceiling/roof (11m2)*	*44*	*44*	*47*	*54*	*62*	*67*	*72*	*77*	36.0
STL 2									
STL 3									
STL 4									
Noise through Component 1	-7	-2	-4	-11	-17	-26	-39	-55	2
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**5**	**6**	**5**	**5**	**5**	**5**	**5**	**5**	**6**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	24	26	25	27	27	23	20	8	33
Façade 2	5	6	5	5	5	5	5	5	6
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**24**	**26**	**25**	**27**	**27**	**23**	**20**	**10**	**33**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 1

ROOM DATA
Height= 2.7 m Depth= 3.5 m
Width= 3.5 m VOL= 33.1 m3

		63	125	250	500	1k	2k	4k	8k	A
	Bedroom, carpet floor, furnished (RT60, sec)	*0.4*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.33*
	FAÇADE 1 (east) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - H7	36	44	47	48	51	50	41	25	56
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	4.1
STL 2	*4mm annealed monolithic - window*	*16*	*21*	*22*	*29*	*33*	*35*	*31*	*36*	5.4
STL 3										
STL 4										
	Noise through Component 1	1	7	7	-1	-6	-14	-25	-42	11
	Noise through Component 2	22	24	26	21	19	16	11	-10	30
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 1	**22**	**24**	**26**	**21**	**19**	**16**	**11**	**3**	**30**
	FAÇADE 2 (south) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - H7	36	44	47	48	51	50	41	25	56
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	9.5
STL 2										
STL 3										
STL 4										
	Noise through Component 1	5	11	11	3	-2	-10	-21	-39	15
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 2	**8**	**12**	**12**	**7**	**6**	**5**	**5**	**5**	**15**
	FAÇADE 3 (roof) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - R7	30	36	37	38	40	36	29	17	45
STL 1	*200 mm thick concrete ceiling/roof (11m2)*	*44*	*44*	*47*	*54*	*62*	*67*	*72*	*77*	12.3
STL 2										
STL 3										
STL 4										
	Noise through Component 1	-9	-3	-5	-11	-17	-26	-38	-56	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 3	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**6**
	FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	22	24	26	21	19	16	11	3	30
Façade 2	8	12	12	7	6	5	5	5	15
Façade 3	5	5	5	5	5	5	5	5	6
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**22**	**24**	**26**	**21**	**19**	**17**	**13**	**10**	**31**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 5.5 m
Width= 7 m VOL= 104.0 m3

		63	125	250	500	1k	2k	4k	8k	A
	Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
	FAÇADE 1 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - H6	40	47	50	52	56	54	47	37	60
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	2.7
STL 2	*4mm toughened glass - sliding door*	*15*	*19*	*23*	*24*	*27*	*29*	*26*	*31*	12.2
STL 3										
STL 4										
	Noise through Component 1	1	6	6	-1	-5	-14	-23	-35	10
	Noise through Component 2	27	30	29	30	31	27	23	8	38
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 1	**27**	**30**	**29**	**30**	**31**	**27**	**23**	**9**	**38**
	FAÇADE 2 (south) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - H7	36	44	47	48	51	50	41	25	56
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	18.9
STL 2										
STL 3										
STL 4										
	Noise through Component 1	5	11	11	3	-2	-10	-21	-38	15
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 2	**8**	**12**	**12**	**7**	**6**	**5**	**5**	**5**	**16**
	FAÇADE 3 (roof) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - R7	30	36	37	38	40	36	29	17	45
STL 1	*200 mm thick concrete ceiling/roof (11m2)*	*44*	*44*	*47*	*54*	*62*	*67*	*72*	*77*	38.5
STL 2										
STL 3										
STL 4										
	Noise through Component 1	-7	-1	-3	-9	-15	-24	-36	-53	3
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 3	**5**	**6**	**6**	**5**	**5**	**5**	**5**	**5**	**7**
	FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	27	30	29	30	31	27	23	9	38
Façade 2	8	12	12	7	6	5	5	5	16
Façade 3	5	6	6	5	5	5	5	5	7
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**27**	**30**	**30**	**30**	**31**	**27**	**24**	**12**	**38**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 2

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - H4	41	48	50	52	57	54	49	41	61
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	1.1
STL 2 *6.38mm laminated glass - sliding door*	17	24	29	31	36	33	38	41	8.1
STL 3									
STL 4									
Noise through Component 1	2	7	6	-1	-4	-14	-22	-31	10
Noise through Component 2	29	28	26	25	25	25	15	4	35
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**29**	**28**	**26**	**25**	**25**	**25**	**15**	**7**	**35**
FAÇADE 2 (roof) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - R6	31	36	37	37	40	35	28	18	45
STL 1 *200 mm thick concrete ceiling/roof (11m2)*	44	44	47	54	62	67	72	77	9.0
STL 2									
STL 3									
STL 4									
Noise through Component 1	-8	-3	-5	-12	-17	-27	-39	-55	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**6**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	29	28	26	25	25	25	15	7	35
Façade 2	5	5	5	5	5	5	5	5	6
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**29**	**28**	**26**	**25**	**25**	**25**	**16**	**10**	**35**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 2

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - H4	38	45	47	49	54	51	46	38	58
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	1.1
STL 2 *6.38mm laminated glass - sliding door*	17	24	29	31	36	33	38	41	8.1
STL 3									
STL 4									
Noise through Component 1	-1	4	3	-4	-7	-17	-25	-34	7
Noise through Component 2	26	25	23	22	22	22	12	1	32
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**26**	**25**	**23**	**22**	**22**	**22**	**13**	**5**	**32**
FAÇADE 2 (roof) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - R6	28	33	34	34	37	32	25	15	42
STL 1 *200 mm thick concrete ceiling/roof (11m2)*	44	44	47	54	62	67	72	77	9.0
STL 2									
STL 3									
STL 4									
Noise through Component 1	-11	-6	-8	-15	-20	-30	-42	-58	-3
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	26	25	23	22	22	22	13	5	32
Façade 2	5	5	5	5	5	5	5	5	5
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**26**	**25**	**23**	**23**	**23**	**22**	**14**	**9**	**32**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 4.5 m
Width= 9 m VOL= 109.4 m3

	63	125	250	500	1k	2k	4k	8k	A
Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
FAÇADE 1 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - H4	41	48	50	52	57	54	49	41	61
STL 1 *AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	1.4
STL 2 *4mm toughened glass - sliding door*	*15*	*19*	*23*	*24*	*27*	*29*	*26*	*31*	10.8
STL 3									
STL 4									
Noise through Component 1	-1	4	3	-4	-7	-17	-24	-34	7
Noise through Component 2	28	31	29	30	32	27	25	11	38
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**28**	**31**	**29**	**30**	**32**	**27**	**25**	**12**	**38**
FAÇADE 2 (roof) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - R6	31	36	37	37	40	35	28	18	45
STL 1 *200 mm thick concrete ceiling/roof (11m2)*	*44*	*44*	*47*	*54*	*62*	*67*	*72*	*77*	40.5
STL 2									
STL 3									
STL 4									
Noise through Component 1	-6	-1	-3	-10	-15	-25	-37	-52	3
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**5**	**6**	**6**	**5**	**5**	**5**	**5**	**5**	**7**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	28	31	29	30	32	27	25	12	38
Façade 2	5	6	6	5	5	5	5	5	7
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**28**	**31**	**29**	**30**	**32**	**27**	**25**	**13**	**38**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 2

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - H2	43	49	51	54	59	56	51	44	63
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	1.1
STL 2 *6.38mm laminated glass - sliding door*	17	24	29	31	36	33	38	41	8.1
STL 3									
STL 4									
Noise through Component 1	4	8	7	1	-2	-12	-20	-28	12
Noise through Component 2	31	29	27	27	27	27	17	7	36
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**31**	**29**	**27**	**27**	**27**	**27**	**17**	**8**	**36**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	31	29	27	27	27	27	17	8	36
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**31**	**29**	**27**	**27**	**27**	**27**	**18**	**10**	**36**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Bed 2

ROOM DATA
Height= 2.7 m Depth= 3 m
Width= 3 m VOL= 24.3 m3

	63	125	250	500	1k	2k	4k	8k	A
Bedroom, carpet floor, furnished (RT60, sec)	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
FAÇADE 1 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - H2	40	46	48	51	56	53	48	41	60
STL 1 *AFS 162 panel - external wall*	35	37	40	49	57	64	66	67	1.1
STL 2 *6.38mm laminated glass - sliding door*	17	24	29	31	36	33	38	41	8.1
STL 3									
STL 4									
Noise through Component 1	1	5	4	-2	-5	-15	-23	-31	9
Noise through Component 2	28	26	24	24	24	24	14	4	33
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 1	**28**	**26**	**24**	**24**	**24**	**24**	**15**	**7**	**33**
FAÇADE 2 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1									
STL 2									
STL 3									
STL 4									
Noise through Component 1	0	0	0	0	0	0	0	0	0
Noise through Component 2	0	0	0	0	0	0	0	0	0
Noise through Component 3	0	0	0	0	0	0	0	0	0
Noise through Component 4	0	0	0	0	0	0	0	0	0
NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	28	26	24	24	24	24	15	7	33
Façade 2	0	0	0	0	0	0	0	0	0
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**28**	**26**	**24**	**24**	**24**	**24**	**15**	**9**	**33**

OUTDOOR TO INDOOR SOUND TRANSMISSION

Job 2727
Client C/o CMT Architects
Site 141 Waldron Road, Chester Hill
Room Kitchen/Dining/Living

ROOM DATA
Height= 2.7 m Depth= 4.5 m
Width= 9 m VOL= 109.4 m3

		63	125	250	500	1k	2k	4k	8k	A
	Living / Lounge, carpet floor, furnished (RT60, sec)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.58*
	FAÇADE 1 (North) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) -H1	46	52	54	57	62	59	55	48	66
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	8.1
STL 2	*10.38mm laminated glass*	*22*	*26*	*31*	*35*	*35*	*35*	*42*	*48*	9.5
STL 3	*4mm annealed monolithic glass - window*	*16*	*21*	*22*	*29*	*33*	*35*	*31*	*36*	5.4
STL 4	*10.38mm laminated glass*	*22*	*26*	*31*	*35*	*35*	*35*	*42*	*48*	9.5
	Noise through Component 1	11	15	14	8	5	-5	-11	-19	19
	Noise through Component 2	25	28	24	23	28	25	14	0	34
	Noise through Component 3	29	29	30	27	27	23	22	10	36
	Noise through Component 4	25	28	24	23	28	25	14	0	34
	NOISE THROUGH FAÇADE 1	**32**	**33**	**32**	**30**	**33**	**29**	**23**	**11**	**40**
	FAÇADE 2 (west) - EXTERNAL FAÇADE NOISE LEVEL, dB(A) - H2	43	49	51	54	59	56	51	44	63
STL 1	*AFS 162 panel - external wall*	*35*	*37*	*40*	*49*	*57*	*64*	*66*	*67*	1.4
STL 2	*6.38mm laminated glass - sliding door*	*17*	*24*	*29*	*31*	*36*	*33*	*38*	*41*	10.8
STL 3										
STL 4										
	Noise through Component 1	1	5	4	-2	-5	-15	-22	-31	9
	Noise through Component 2	28	27	24	25	25	25	15	4	33
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 2	**28**	**27**	**24**	**25**	**25**	**25**	**15**	**6**	**33**
	FAÇADE 3 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	FAÇADE 4 - EXTERNAL FAÇADE NOISE LEVEL, dB(A)									
STL 1										
STL 2										
STL 3										
STL 4										
	Noise through Component 1	0	0	0	0	0	0	0	0	0
	Noise through Component 2	0	0	0	0	0	0	0	0	0
	Noise through Component 3	0	0	0	0	0	0	0	0	0
	Noise through Component 4	0	0	0	0	0	0	0	0	0
	NOISE THROUGH FAÇADE 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

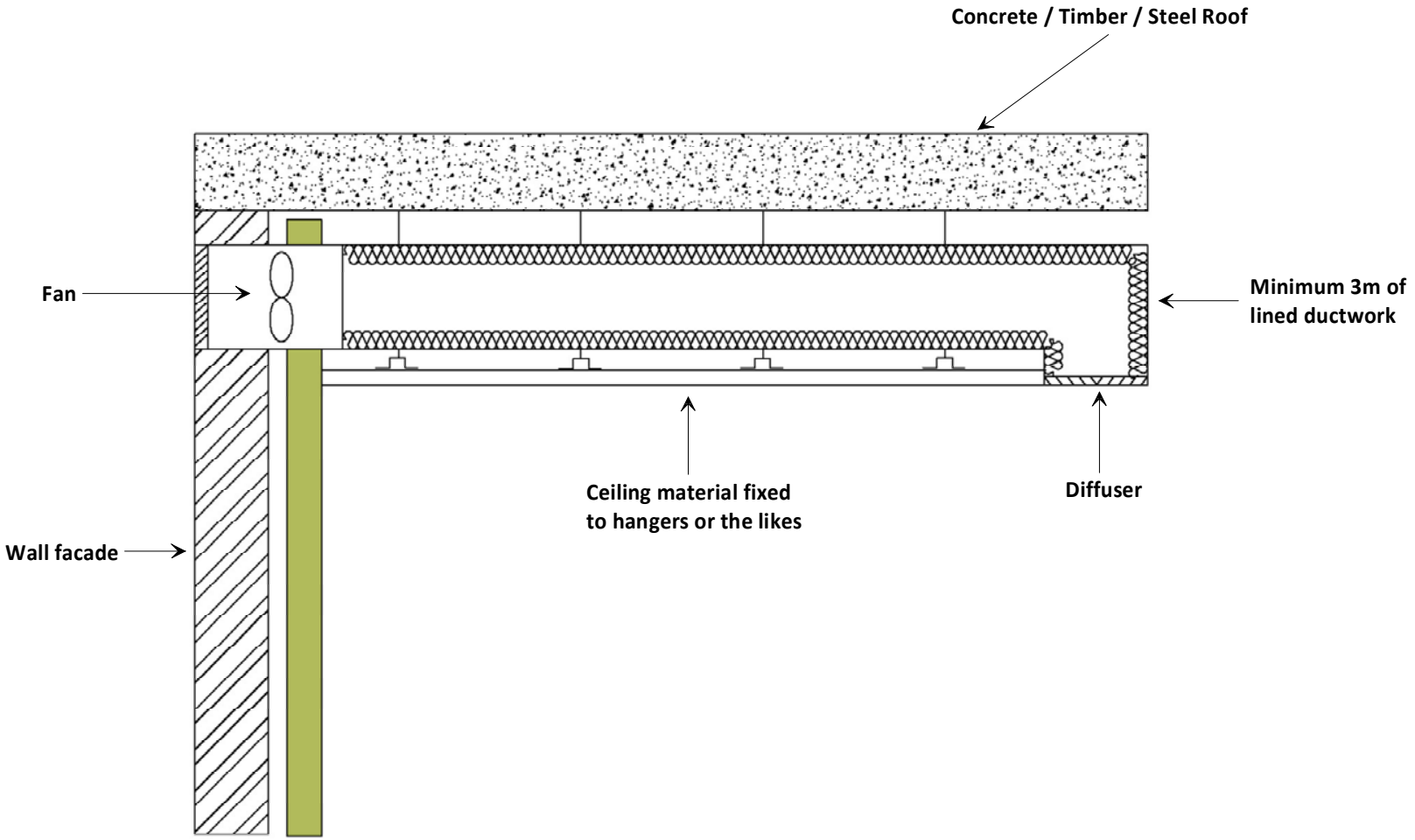
SUMMARY OF RESULTS — Internal room noise level, dB(A)

Frequency	63	125	250	500	1k	2k	4k	8k	A
Façade 1	32	33	32	30	33	29	23	11	40
Façade 2	28	27	24	25	25	25	15	6	33
Façade 3	0	0	0	0	0	0	0	0	0
Façade 4	0	0	0	0	0	0	0	0	0
CALCULATED INDOOR NOISE LEVEL, dB(A)	**33**	**34**	**33**	**31**	**33**	**31**	**24**	**13**	**40**

APPENDIX E

APPENDIX E

APPENDIX E



KOIKAS ACOUSTICS PTY LTD
CONSULTANTS IN NOISE & VIBRATION
ABN 12 058 524 771
Commercial 1 (Unit 27)
637 - 645 Forest Road
BEXLEY NSW 2207
Ph: (02) 9587 9702
Fax: (02) 9587 5337
E-mail: Office@KoikasAcoustics.com

Project	Drawn by	Checked	File
ACOUSTIC DESIGN DETAIL	AS	N/A	Mech Vent Detail Wall.srf
Title	**Drawing Number**	**Revision**	**Scale**
Mechanical Ventilation Wall penetration	1 of 1	V1	NOT TO SCALE
			Date 19th April 2011

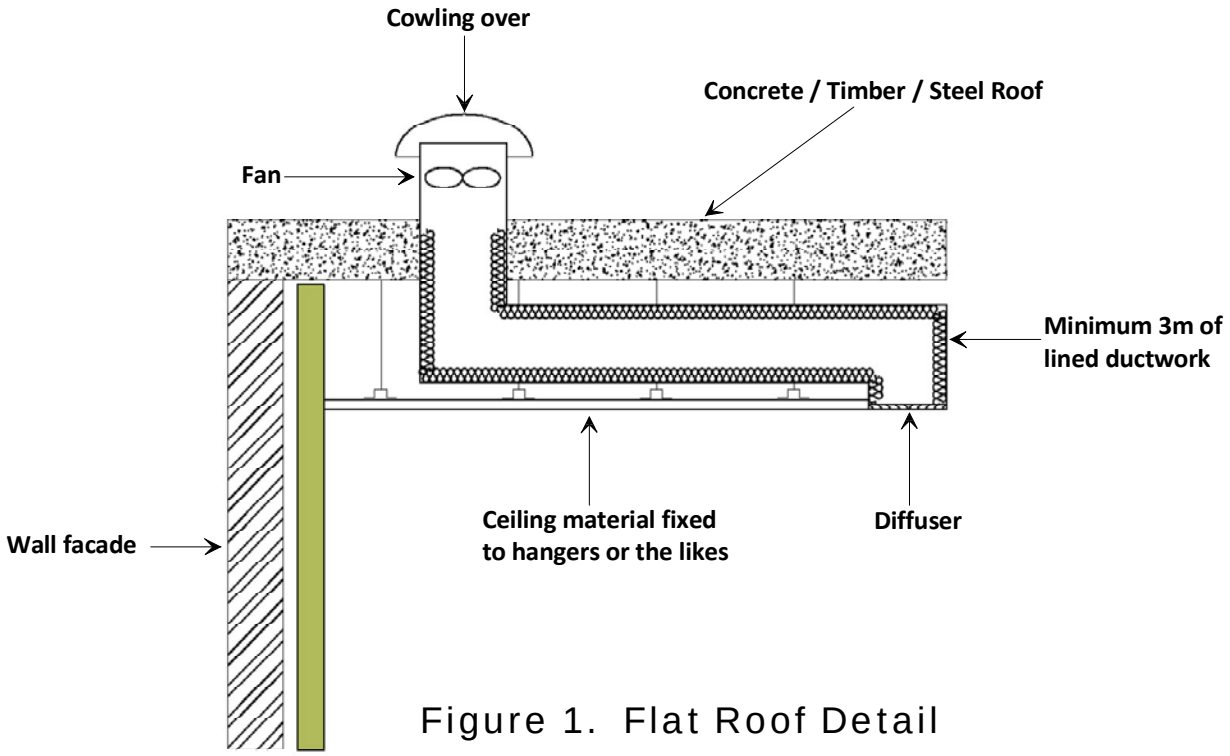


Figure 1. Flat Roof Detail

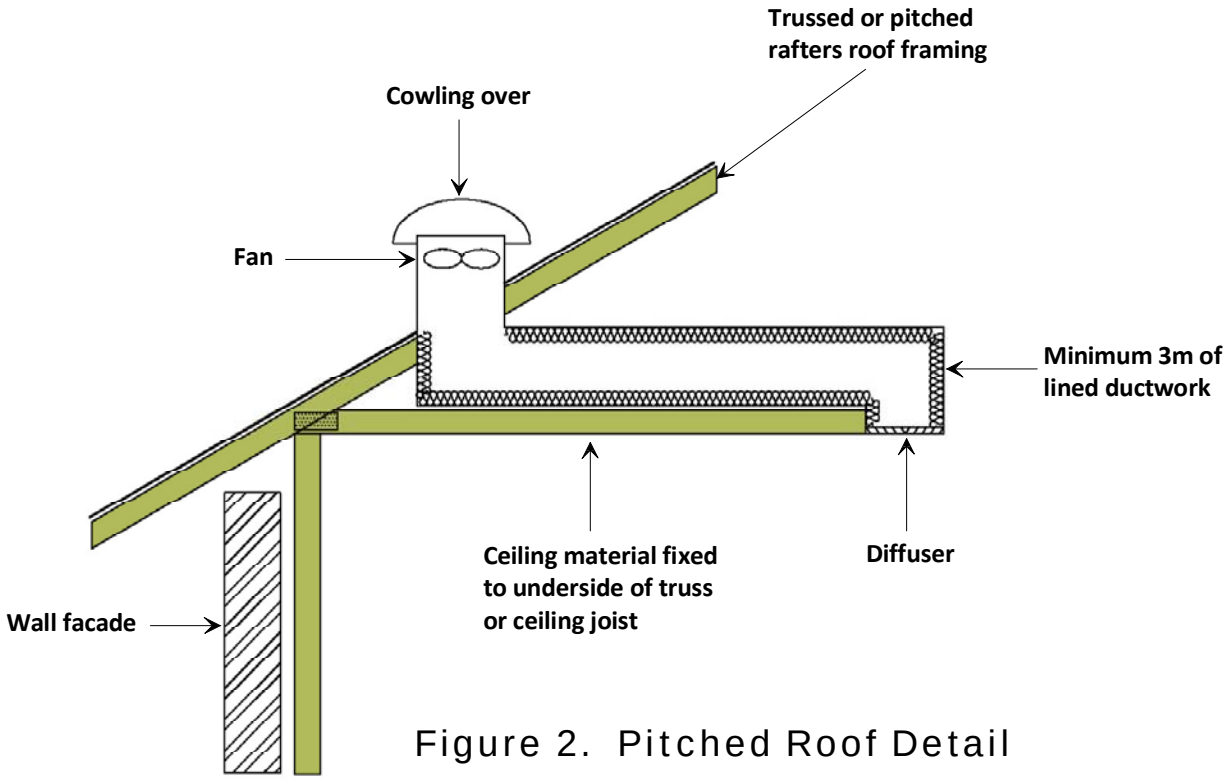


Figure 2. Pitched Roof Detail

KOIKAS ACOUSTICS PTY LTD
CONSULTANTS IN NOISE & VIBRATION
Commercial 1 (Unit 27)
637 - 645 Forest Road
BEXLEY NSW 2207
ABN 12 058 524 771
Ph: (02) 9587 9702
Fax: (02) 9587 5337
E-mail: Office@KoikasAcoustics.com

MECHANICAL VENTILATION DETAILS

Figure 1. Flat Roof
Figure 2. Pitched Roof

APPENDIX F

APPENDIX F

APPENDIX F

Minimum Glazing Requirement Schedule - Ground				
Unit	**Room**	**Window/Sliding Door**	**Glazing Thickness (mm)**	**Mechanical Ventilation**
Retail 1	Retail	Door	6.38 mm laminated	Yes
		Window	10.38 mm laminated	
Retail 2	Retail	Door	6.38 mm laminated	Yes
		Window	10.38 mm laminated	
Retail 3	Retail	North Door	6.38 mm laminated	Yes
		Windows	6.38 mm laminated	
		West Door	4 mm toughened	

Minimum Glazing Requirement Schedule – Level 1				
Unit	**Room**	**Window/Sliding Door**	**Glazing Thickness (mm)**	**Mechanical Ventilation**
Unit 1	KDL	Sliding Door	4 mm toughened	No
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 2	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 3	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 4	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 5	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 6	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 7	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 8	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 9	KDL	Sliding Door	4 mm toughened	No
	Bed 1	Window	4 mm float	Yes
Unit 10	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	No
	Bed 2	Sliding Door	6.38 mm laminated	Yes
Unit 11	KDL	Sliding Door	4 mm toughened	Yes
		Window	4 mm float	
	Bed 1	Window	4 mm float	No
	Bed 2	Sliding Door	6.38 mm laminated	Yes
Unit 12	KDL	Sliding Door	4 mm toughened	Yes
		Window	4 mm float	
	Bed 1	Window	4 mm float	No
	Bed 2	Sliding Door	10.38 mm laminated	Yes

Unit 13	KDL	Sliding Doors	10.38 mm laminated	Yes
		Window – east	6.38 mm laminated	
		Window - north	10.38 mm laminated	
	Bed 1	Window	4 mm float	No
	Bed 2	Sliding Door	10.38 mm laminated	Yes
Unit 14	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No
Unit 15	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No
Unit 16	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No
Unit 17	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No
Unit 18	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No
Unit 19	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No
Unit 20	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No
Common Room	Common Room	Window	4 mm float	No

Minimum Glazing Requirement Schedule – Level 2

Unit	Room	Window/Sliding Door	Glazing Thickness (mm)	Mechanical Ventilation
Unit 1	KDL	Sliding Door	4 mm toughened	No
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 2	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 3	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 4	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 5	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 6	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 7	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 8	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 9	KDL	Sliding Door	4 mm toughened	No
	Bed 1	Window	4 mm float	Yes

Unit 10	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	No
	Bed 2	Sliding Door	6.38 mm laminated	Yes
Unit 11	KDL	Sliding Door	4 mm toughened	Yes
		Window	4 mm float	
	Bed 1	Window	4 mm float	No
	Bed 2	Sliding Door	6.38 mm laminated	Yes
Unit 12	KDL	Sliding Door	4 mm toughened	Yes
		Window	4 mm float	
	Bed 1	Window	4 mm float	No
	Bed 2	Sliding Door	10.38 mm laminated	Yes
Unit 13	KDL	Sliding Doors	10.38 mm laminated	Yes
		Window – east	6.38 mm laminated	
		Window - north	10.38 mm laminated	
	Bed 1	Window	4 mm float	No
	Bed 2	Sliding Door	10.38 mm laminated	Yes
Unit 14	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No
Unit 15	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No
Unit 16	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No
Unit 17	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No
Unit 18	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No
Unit 19	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No
Unit 20	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No

Minimum Glazing Requirement Schedule – Level 3				
Unit	**Room**	**Window/Sliding Door**	**Glazing Thickness (mm)**	**Mechanical Ventilation**
Unit 1	KDL	Sliding Door	4 mm toughened	No
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 2	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 3	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 4	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 5	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 6	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No

Unit 7	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 8	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 9	KDL	Sliding Door	4 mm toughened	No
	Bed 1	Window	4 mm float	Yes
Unit 10	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	No
	Bed 2	Sliding Door	6.38 mm laminated	Yes
Unit 11	KDL	Sliding Door	4 mm toughened	Yes
		Window	4 mm float	
	Bed 1	Window	4 mm float	No
	Bed 2	Sliding Door	6.38 mm laminated	Yes
Unit 12	KDL	Sliding Door	4 mm toughened	Yes
		Window	4 mm float	
	Bed 1	Window	4 mm float	No
	Bed 2	Sliding Door	10.38 mm laminated	Yes
Unit 13	KDL	Sliding Doors	10.38 mm laminated	Yes
		Window – east	6.38 mm laminated	
		Window - north	6.38 mm laminated	
	Bed 1	Window	4 mm float	No
	Bed 2	Sliding Door	10.38 mm laminated	Yes
Unit 14	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No
Unit 15	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No
Unit 16	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No
Unit 17	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No
Unit 18	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No
Unit 19	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No
Unit 20	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No

Minimum Glazing Requirement Schedule – Level 4

Unit	Room	Window/Sliding Door	Glazing Thickness (mm)	Mechanical Ventilation
Unit 1	KDL	Sliding Door	4 mm toughened	No
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 2	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 3	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 4	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No

Unit 5	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 6	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 7	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 8	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 9	KDL	Sliding Door	4 mm toughened	No
	Bed 1	Window	4 mm float	Yes
Unit 10	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	No
	Bed 2	Sliding Door	6.38 mm laminated	Yes
Unit 11	KDL	Sliding Door	4 mm toughened	Yes
		Window	4 mm float	
	Bed 1	Window	4 mm float	No
	Bed 2	Sliding Door	6.38 mm laminated	Yes
Unit 12	KDL	Sliding Door	4 mm toughened	Yes
		Window	4 mm float	
	Bed 1	Window	4 mm float	No
	Bed 2	Sliding Door	6.38 mm laminated	Yes
Unit 13	KDL	Sliding Doors	10.38 mm laminated	Yes
		Window – east	6.38 mm laminated	
		Window - north	6.38 mm laminated	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	10.38 mm laminated	Yes
Unit 14	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No
Unit 15	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No
Unit 16	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No
Unit 17	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No
Unit 18	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No
Unit 19	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No
Unit 20	KDL	Sliding Door	Double glazing	Yes
	Bed 1	Window	4 mm float	No

Minimum Glazing Requirement Schedule – Level 5				
Unit	**Room**	**Window/Sliding Door**	**Glazing Thickness (mm)**	**Mechanical Ventilation**
Unit 1	KDL	Sliding Door	4 mm toughened	No
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 2	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 3	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 4	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 5	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 6	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 7	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 8	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 9	KDL	Sliding Door	4 mm toughened	No
	Bed 1	Window	4 mm float	Yes
Unit 10	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	No
	Bed 2	Sliding Door	6.38 mm laminated	Yes
Unit 11	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	No
	Bed 2	Sliding Door	6.38 mm laminated	Yes
Unit 12	KDL	Sliding Door	4 mm toughened	Yes
		Window	4 mm float	
	Bed 1	Window	4 mm float	No
	Bed 2	Sliding Door	6.38 mm laminated	Yes
Unit 13	KDL	Sliding Doors	10.38 mm laminated	Yes
		Window – east	6.38 mm laminated	
		Window - north	10.38 mm laminated	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	6.38 mm laminated	Yes

Minimum Glazing Requirement Schedule – Level 6				
Unit	**Room**	**Window/Sliding Door**	**Glazing Thickness (mm)**	**Mechanical Ventilation**
Unit 1	KDL	Sliding Door	4 mm toughened	No
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 2	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 3	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 4	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 5	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 6	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 7	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 8	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 9	KDL	Sliding Door	4 mm toughened	No
	Bed 1	Window	4 mm float	Yes
Unit 10	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	No
	Bed 2	Sliding Door	6.38 mm laminated	Yes
Unit 11	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	No
	Bed 2	Sliding Door	6.38 mm laminated	Yes
Unit 12	KDL	Sliding Door	4 mm toughened	Yes
		Window	4 mm float	
	Bed 1	Window	4 mm float	No
	Bed 2	Sliding Door	6.38 mm laminated	Yes
Unit 13	KDL	Sliding Doors	10.38 mm laminated	Yes
		Window – east	6.38 mm laminated	
		Window - north	6.38 mm laminated	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	6.38 mm laminated	Yes

Minimum Glazing Requirement Schedule – Level 7				
Unit	**Room**	**Window/Sliding Door**	**Glazing Thickness (mm)**	**Mechanical Ventilation**
Unit 1	KDL	Sliding Door	4 mm toughened	No
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 2	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 3	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 4	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 5	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 6	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 7	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 8	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	4 mm toughened	No
Unit 9	KDL	Sliding Door	4 mm toughened	No
	Bed 1	Window	4 mm float	Yes
Unit 10	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	No
	Bed 2	Sliding Door	6.38 mm laminated	Yes
Unit 11	KDL	Sliding Door	4 mm toughened	No
		Window	4 mm float	
	Bed 1	Window	4 mm float	No
	Bed 2	Sliding Door	6.38 mm laminated	Yes
Unit 12	KDL	Sliding Door	4 mm toughened	Yes
		Window	4 mm float	
	Bed 1	Window	4 mm float	No
	Bed 2	Sliding Door	6.38 mm laminated	Yes
Unit 13	KDL	Sliding Doors – north	10.38 mm laminated	Yes
		Window – east	6.38 mm laminated	
		Sliding Doors - west	6.38 mm laminated	
		Window - north	4 mm float	
	Bed 1	Window	4 mm float	Yes
	Bed 2	Sliding Door	6.38 mm laminated	Yes

Notes:

- **Double glazing** refers to: 4 mm toughened + 100 mm air gap + 6.38 mm laminated
- External void windows are **4 mm float**.

Disclaimer:

Koikas Acoustics notes that the recommendations provided in this report are for the minimum required glazing that will achieve the desired acoustic performance indoors. No consideration has been given to other factors such as safety, thermal or energy efficiency that may render the recommended glazing as non-compliant. It is the responsibility of the client to ensure all glazed windows and sliding doors installed on-site meets all building design requirements.

APPENDIX G

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Bankstown, New South Wales
April 2015 Daily Weather Observations

Australian Government
Bureau of Meteorology

Date	Day	Temps		Rain	Evap	Sun	Max wind gust			9am						3pm					
		Min	Max				Dirn	Spd	Time	Temp	RH	Cld	Dirn	Spd	MSLP	Temp	RH	Cld	Dirn	Spd	MSLP
		°C	°C	mm	mm	hours		km/h	local	°C	%	eighths		km/h	hPa	°C	%	eighths		km/h	hPa
1	We	15.7	26.2	9.4			NW	28	11:33	18.4	90		WNW	4	1025.2	25.3	55		NNE	13	1020.6
2	Th	15.6	29.8	0			SE	50	22:25	18.8	89		WNW	4	1019.0	28.6	40		NW	9	1016.0
3	Fr	17.0	18.7	0.6			SSW	50	11:41	17.4	78		SSW	9	1024.3	17.3	86		SW	13	1023.3
4	Sa	16.4	19.2	18.8			SE	46	09:45	18.0	87		ESE	22	1020.6	17.7	82		SE	20	1017.9
5	Su	14.9	26.2	8.8			ENE	26	14:24	19.2	68		SW	13	1010.8	24.4	51		ESE	17	1005.4
6	Mo	14.0	26.2	0			NNW	44	14:32	16.9	94		SSW	7	1008.2	18.7	78		W	7	1006.6
7	Tu	12.8	23.2	1.4			W	61	15:50	18.3	66		WNW	9	1008.0	21.2	29		NW	30	1007.3
8	We	12.7	22.7	0.2			WSW	52	15:46	19.2	40		WSW	20	1010.9	20.7	36		WSW	31	1013.8
9	Th	13.6	22.6	0			SSE	44	15:43	18.6	42		SW	17	1021.0	21.4	36		SE	28	1020.1
10	Fr	12.5	22.6	0			SE	35	13:43	17.0	62		SSW	11	1025.1	21.5	44		SE	22	1022.8
11	Sa	14.8	22.5	6.8			E	24	15:52	17.2	88		W	2	1023.5	21.3	63		E	17	1019.3
12	Su	12.5	23.9	0.2			SSE	46	12:10	18.3	78		W	7	1018.9	21.3	59		SSE	28	1018.2
13	Mo	13.8	22.1	0			ESE	31	14:41	18.1	62		SW	11	1023.8	20.7	48		SE	20	1021.1
14	Tu	11.0	24.1	0			E	31	15:02	17.0	72			Calm	1024.0	22.1	45		SE	20	1020.9
15	We	11.6	28.0	0			WSW	48	19:22	17.5	69		WSW	9	1025.1	26.6	38		ENE	13	1020.9
16	Th	15.0	31.7	7.4			W	39	14:27	21.6	67		WNW	11	1022.4	30.9	28		W	22	1019.1
17	Fr	19.2	24.1	2.4			ENE	19	16:33	20.3	86		ENE	9	1024.7	21.4	80		E	9	1021.1
18	Sa	17.4	28.0	1.4			WNW	46	20:53	24.1	65		NNW	13	1017.4	26.1	48		N	17	1013.4
19	Su	15.6	23.5	4.8			SE	57	16:21	18.9	56		SW	19	1018.7	19.6	59		SSE	35	1019.7
20	Mo	12.0	17.0	4.6			SSE	80	18:18	14.1	84		S	31	1023.9	16.8	86		SSE	39	1021.4
21	Tu	14.0	17.8	79.0			SE	80	10:09	15.2	81		SSE	39	1020.3	14.9	75		S	37	1018.4
22	We	13.1	18.8	72.8			S	69	03:35	15.1	88		S	22	1014.3	17.2	89		SW	17	1010.9
23	Th	11.9	22.6	61.0			SE	24	13:01	17.7	94		SW	11	1012.5	21.7	59		SE	11	1009.6
24	Fr	13.7		0.2						15.7	97		WNW	6	1008.0						
Statistics for the first 24 days of April 2015																					
	Mean	14.2	23.5							18.0	75			12	1018.8	21.6	57			20	1016.9
	Lowest	11.0	17.0							14.1	40			Calm	1008.0	14.9	28		W	7	1005.4
	Highest	19.2	31.7	79.0			#	80		24.1	97		SSE	39	1025.2	30.9	89		SSE	39	1023.3
	Total			279.8																	

Observations were drawn from Bankstown Airport AWS {station 066137}

The closest station with evaporation observations is at Prospect Dam, about 13 km to the northwest. The closest station with sunshine observations is at Sydney Airport, about 17 km to the east. The closest station with cloud observations is at Liverpool, about 9 km to the west.

IDCJDW2008.201504 Prepared at 23:36 UTC on 23 Apr 2015