

Vipac Engineers & Scientists Limited A.B.N. 33 005 453 627  
2 Sirius Road, LANE COVE  
NSW 2066 AUSTRALIA

t. (+61 2) 9422 4222 f. (+61 2) 9420 5911  
e. [sydney@vipac.com.au](mailto:sydney@vipac.com.au) w. [www.vipac.com.au](http://www.vipac.com.au)  
ISO9001 Certified Quality Management System

---

<b>Attention</b>	Felipe Ayala
<b>Company</b>	MacKenzie Architects
<b>Sender</b>	Fu Siong Hie
<b>Date</b>	27 <sup>th</sup> October 2011
<b>Reference</b>	20C-10-0273-TNT-465421-0
<b>Pages</b>	1 of 2
<b>Subject</b>	Acoustic Requirements for Balcony Enclosures – 573-585 Pacific Highway, Killara

---

*This correspondence is Commercial-in-Confidence.*

---

Felipe,

The following is our response to the letter from the JRPP dated 18<sup>th</sup> of October 2011 in regards to the acoustic treatment to the proposed balcony enclosures.

An acoustic assessment of the proposed residential development has been carried out in accordance with the relevant Ku-Ring-Gai Council Development Control Plans (DCP) and Department of Planning (DoP) noise guidelines and the details of our investigation can be found in VIPAC's report ref: 20C-10-0273-TRP-462659-2 (dated 19<sup>th</sup> October 2011).

Based on our assessment of the surround road traffic noise, the recommended acoustic glazing for the enclosed balconies to achieve the internal noise level requirements is presented in Table 1. Provided the recommendations are implemented into the design, we would expect that the proposed residential development would meet the requirements of Council, the DoP and also provide a satisfactory level of internal acoustic amenity.

I trust that this information is satisfactory.

Regards,

**VIPAC ENGINEERS & SCIENTISTS LTD**



Fu Siong Hie

**Consulting Engineer**

**Table 1: Schedule of Acoustic Treatment for Balcony Enclosures**

Building element	Level	Units	Space	Internal Noise Requirement $L_{Aeq(period)}$	Minimum Glazing Construction	Minimum STC/Rw Requirement <sup>1</sup>
Glazing	1	A8, B6, B11,	Living/Bed Balcony	Living: 40 dBA (at any time) Bed: 35 dBA (10 pm – 7 am)	6.38mm laminated inner balcony, 6.38mm laminated outer balcony	-
	2	A12, B12, B17,	Living/Bed Balcony	Living: 40 dBA (at any time) Bed: 35 dBA (10 pm – 7 am)	6.38mm laminated inner balcony, 6.38mm laminated outer balcony	-
	3	A16, B18 B23	Living/Bed Balcony	Living: 40 dBA (at any time) Bed: 35 dBA (10 pm – 7 am)	6.38mm laminated inner balcony, 6.38mm laminated outer balcony	-

<sup>1</sup> For glazing, this refers to the glass performance alone, the expected performance when installed in a frame is typically 3dB lower.