APPENDIX I – OUTSIDE TO INSIDE CALCULATIONS

Frequency Units 1 & 2 Living Rooms (Worst Case)	Hz	63	125	250	500	1K	2K	4K	8K	dB(A)
Façade Level, LAeq, 16hr	**dB**	52	46	43	45	47	47	40	30	**52**
SRI Glazing, 4/16/4, 31 Rw	dB	-13	-21	-18	-26	-37	-42	-33	-35	
Area Correction, 10m2	dB	10	10	10	10	10	10	10	10	
Room Volume	m3	84	84	84	84	84	84	84	84	
Acoustic Absorption to 0.5s RT	m2	27	27	27	27	27	27	27	27	
Absorption Correction	dB	-14	-14	-14	-14	-14	-14	-14	-14	
Net SPL	dB	35	21	21	15	6	1	3	-9	**17**
SRI External Wall, masonry outer, 45 dB Rw	dB	-36	-42	-41	-43	-53	-64	-65	-65	
Area Correction, 15m2	dB	12	12	12	12	12	12	12	12	
Room Volume	m3	84	84	84	84	84	84	84	84	
Acoustic Absorption to 0.5s RT	m2	27	27	27	27	27	27	27	27	
Absorption Correction	dB	-14	-14	-14	-14	-14	-14	-14	-14	
Net SPL	dB	13	1	-1	-1	-9	-20	-28	-38	**-1**
SRI Roof	dB	-12	-25	-40	-46	-52	-53	-53	-57	
Area Correction, 35m2	dB	15	15	15	15	15	15	15	15	
Room Volume	m3	84	84	84	84	84	84	84	84	
Acoustic Absorption to 0.5s RT	m2	27	27	27	27	27	27	27	27	
Absorption Correction	dB	-14	-14	-14	-14	-14	-14	-14	-14	
Net SPL	dB	41	22	4	0	-4	-5	-12	-26	**16**
Dnew of trickle ventilator, 32 dB Dn,e,w	dB	-40	-39	-35	-35	-31	-32	-35	-40	
Acoustic Absorption in room	m2	27	27	27	27	27	27	27	27	
Aborption Correction to ref 10m2	dB	-4	-4	-4	-4	-4	-4	-4	-4	
Net SPL	dB	8	3	4	6	12	11	1	-14	**15**
Tolerance on Calculation	dB	3	3	3	3	3	3	3	3	
Combined SPL	**dB**	45	28	24	18	16	14	8	-5	**24**
Frequency **Units 1 & 2 Bedrooms (Worst Case)**	**Hz**	**63**	**125**	**250**	**500**	**1K**	**2K**	**4K**	**8K**	**dB(A)**
Typical night Time Façade Level, LAmax	**dB**	75	63	65	64	60	56	51	42	**65**
SRI Glazing, 4/16/4, 31 Rw	dB	-13	-21	-18	-26	-37	-42	-33	-35	
Area Correction, 3m2	dB	5	5	5	5	5	5	5	5	
Room Volume	m3	30	30	30	30	30	30	30	30	
Acoustic Absorption to 0.5s RT	m2	10	10	10	10	10	10	10	10	
Absorption Correction	dB	-10	-10	-10	-10	-10	-10	-10	-10	
Net SPL	dB	57	37	42	33	18	9	13	2	**36**
SRI Roof, 35 dB Rw	dB	-24	-34	-40	-45	-49	-53	-55	-55	
Area Correction, 12m2	dB	11	11	11	11	11	11	11	11	
Room Volume	m3	30	30	30	30	30	30	30	30	
Acoustic Absorption to 0.5s RT	m2	10	10	10	10	10	10	10	10	
Absorption Correction	dB	-10	-10	-10	-10	-10	-10	-10	-10	
Net SPL	dB	52	30	26	20	12	4	-3	-12	**27**
SRI External Wall, masonry outer	dB	-36	-42	-41	-43	-53	-64	-65	-65	
Area Correction, 20m2	dB	13	13	13	13	13	13	13	13	
Room Volume	m3	30	30	30	30	30	30	30	30	
Acoustic Absorption to 0.5s RT	m2	10	10	10	10	10	10	10	10	
Absorption Correction	dB	-10	-10	-10	-10	-10	-10	-10	-10	
Net SPL	dB	42	24	27	24	10	-5	-11	-20	**24**
Dnew of trickle ventilator, 32 dB Dn,e,w	dB	-40	-39	-35	-35	-31	-32	-35	-40	
Acoustic Absorption in room	m2	10	10	10	10	10	10	10	10	
Aborption Correction to ref 10m2	dB	0	0	0	0	0	0	0	0	
Net SPL	dB	35	24	30	29	29	24	16	2	**32**
Tolerance on Calculation	dB	3	3	3	3	3	3	3	3	
Combined SPL	**dB**	61	41	45	38	33	27	21	8	**41**