# Appendix 9.2 – Indoor Noise Reference

**Table 9.2-1: Room variables**

| Room Variables | Properties |
|---|---|
| Room Length | 5 m |
| Room Width | 4 m |
| Room Height | 3 m |
| Façade Wall Material | Wall – single leaf brick, plastered both sides 125 mm 240 kg/m$^2$ |
| Indoor Wall Surface | Plaster, line or gypsum – solid backing |
| Floor Material | Carpet, Haircord on felt |
| Window Width | 1.25 m |
| Window Height | 1.25 m |
| Window Absorption | Single glaze in heavy frame 6 mm, 15 kg/m$^2$ |
| Source Angle | 0 degrees |

**Table 9.2-2: Sound Reduction Index**

| Material | Sound Reduction Index (dB) in Octave Frequency Band (Hz) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 |
| Wall – Single Leaf Brick, Plastered both sides 125 mm 240 kg/m$^2$ | 30 | 36 | 37 | 40 | 46 | 54 | 57 |
| Closed Window - Single glaze in heavy frame 6mm, 15 kg/m$^2$ | 17 | 11 | 24 | 28 | 32 | 27 | 35 |
| Open Window - NANR116 200k (mm$^2$) | 20 | 14 | 14 | 16 | 14 | 17 | 19 |

**Table 9.2-3: Absorption Coefficient**

| Material | Absorption Coefficient in Octave Frequency Band (Hz) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 |
| Plaster, line or gypsum – solid backing | 0.015 | 0.03 | 0.03 | 0.02 | 0.03 | 0.04 | 0.05 |
| Wood panelling, 12 mm on 25 mm battens | 0.155 | 0.31 | 0.33 | 0.14 | 0.1 | 0.1 | 0.12 |

| Material | Absorption Coefficient in Octave Frequency Band (Hz) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 |
| Carpet, Haircord on felt | 0.05 | 0.1 | 0.15 | 0.25 | 0.3 | 0.3 | 0.3 |