Road Traffic and Passenger Rail - Quiet House Requirements (Based on Table 3 of State Planning Policy 5.4 2019)

Exposure Category	Orientation to corridor	Acoustic ratings					Mechanical ventilation/air conditioning considerations
		Walls	External doors	Windows	Roofs and ceilings of highest floors	Outdoor Living areas	
A Quiet House A	Facing	Bedroom and Indoor Living and work areas Rw + Ctr 45dB	Bedrooms: ➤ R _w +C _{tr} 28dB Indoor Living and work areas: ➤ R _w +C _{tr} 25dB	Bedrooms: Window size dependant ➤ Minimum R _w +C _{tr} 28 dB Indoor Living and work areas Window size dependant ➤ Minimum R _w +C _{tr} 25 dB	➤ R _w +C _{tr} 35dB	At least one outdoor living area located on the opposite side of the building from the transport corridor and/or at least one ground level outdoor living area screened using a solid continuous fence or other structure of minimum 2 metres height above ground level	Acoustically rated openings and ductwork to provide a minimum sound reduction performance of Rw 40dB into sensitive spaces
	Side On		Bedrooms: ➤ R _w +C _{tr} 25dB Indoor Living and work areas: ➤ R _w +C _{tr} 22dB	Bedrooms: Window size dependant ➤ Minimum R _w +C _{tr} 25 dB Indoor Living and work areas Window size dependant ➤ Minimum R _w +C _{tr} 22 dB			
	Opposite		No specific requirements	No specific requirements			
B Quiet House B	Facing	Bedroom and indoor living and work areas > R _w +C _{tr} 50dB	Bedrooms ➤ R _w +C _{tr} 31dB Indoor Living and work areas: ➤ R _w +C _{tr} 28dB	Bedrooms: Window size dependant ➤ Minimum R _w +C _{tr} 31 dB Indoor Living and work areas Window size dependant ➤ Minimum R _w +C _{tr} 28 dB	≻ R _w +C _{tr} 35dB	At least one outdoor living area located on the opposite side of the building from the corridor and/or at least one	 Acoustically rated openings and ductwork to provide a minimum sound reduction performance of Rw 40dB into sensitive spaces
	Side-On		Bedrooms ➤ R _w +C _{tr} 28dB Indoor Living and work areas: ➤ R _w +C _{tr} 28dB	Bedrooms: Window size dependant ➤ Minimum R _w +C _{tr} 28 dB Indoor Living and work areas Window size dependant ➤ Minimum R _w +C _{tr} 25 dB		ground level outdoor living area screened using a solid continuous fence or other structure of minimum 2.4 metres height above ground level	
	Opposite		Bedrooms ➤ R _w +C _{tr} 25dB Indoor Living and work areas: ➤ R _w +C _{tr} 25dB	Bedrooms: Window size dependant ➤ Minimum R _w +C _{tr} 25 dB Indoor Living and work areas Window size dependant ➤ Minimum R _w +C _{tr} 22 dB			
C Quiet House C	Facing	Bedroom and indoor living and work areas > R _w +C _{tr} 50dB	Bedrooms ➤ No External doors to bedrooms facing the corridor Indoor Living and work areas ➤ Rw+Ctr 31dB	Bedrooms: Window size dependant ➤ Minimum R _w +C _{tr} 31dB) Indoor Living and work areas Window size dependant ➤ Minimum R _w +C _{tr} 31dB	> R _w +C _{tr} 40dB	At least one outdoor living area located on the opposite side of the building from the corridor and/or at least one ground level outdoor living	Acoustically rated openings and ductwork to provide a minimum sound reduction performance of Rw 40dB into sensitive spaces.
	Side-on		Bedrooms ➤ R _w +C _{tr} 31dB Indoor Living and work areas ➤ R _w +C _{tr} 28dB	Bedrooms: Window size dependant ➤ Minimum R _w +C _{tr} 31 dB Indoor Living and work areas Window size dependant ➤ Minimum R _w +C _{tr} 28 dB		area screened using a solid continuous fence or other structure of minimum 2.4 metres height above ground level	
	Opposite		Bedrooms: ➤ R _w +C _{tr} 28dB Indoor Living and work areas: ➤ R _w +C _{tr} 28dB	Bedrooms: Window size dependant ➤ Minimum R _w +C _{tr} 28 dB Indoor Living and work areas Window size dependant ➤ Minimum R _w +C _{tr} 25 dB			

Note: The above treatments are a deemed to satisfy construction. Alternative designs are acceptable, provided they are certified by a suitable qualified acoustic consultant