

Traffic Noise

Given the proximity of some lots to Ellerton Drive, we have sought advice from acoustic consultants who have made some recommendations regarding the construction of homes in this area. Their recommendations are in line with standards set out in The Department of Planning (DOP) Guidelines to reduce the effect of traffic noise for properties located close to busy roads.

There are different recommendations depending on a variety of factors, including the location of the lot and the nature of the home to be built on that lot (single v's double storey).

Please review the following plan carefully, as it details predicted traffic noise levels for each lot based on single or double storey construction.

It is important to note that the levels on this plan, relate to the anticipated traffic Ellerton Drive will carry in the year 2031.

Whilst you should seek your own advice from your builder, a typical residential dwelling design would be achieved using standard constructions with proprietary glazing including those described in *Table 1 Category 1: 'Deemed-to-Comply' Construction* methods outlined on the back page of this flyer.

Specific acoustic treatments would not be required for any conventionally-constructed dwelling on any lot, other than closed windows to habitable rooms facing Ellerton Drive for the lots as indicated, which subsequently impacts on ventilation requirements to those rooms.

The DOP Guideline acceptable noise varies from daytime to night time with lower levels for nights which coincidentally coincide with lower traffic volumes on Ellerton Drive.

As we understand to satisfy the requirements, lots affected by traffic noise should close windows on the road side of the dwelling and the dwelling may obtain ventilation by means other than those closed windows. For example, air-conditioning or ventilation may be 'borrowed' from opened windows or doors on the 'non road side' of the dwelling or fresh air could be obtained from acoustically treated ventilators on the road side of the dwelling.

FIGURE 1.
**Daytime Road Traffic
 Noise Levels**
 SINGLE STOREY DWELLINGS

- Legend**
- 50 dBA LAeq (9 hour) Noise Effected
 - 60 dBA LAeq (9 hour)
 - Lot Layout
 - Indicative Dwellings



FIGURE 3.
**Daytime Road Traffic
 Noise Levels**
 DOUBLE STOREY DWELLINGS

- Legend**
- 50 dBA LAeq (9 hour) Noise Effected
 - 60 dBA LAeq (9 hour)
 - Lot Layout
 - Indicative Dwellings



FIGURE 2.
**Night-time Road
 Traffic Noise Levels**
 SINGLE STOREY DWELLINGS

- Legend**
- 45 dBA LAeq (9 hour) Noise Effected
 - 55 dBA LAeq (9 hour)
 - Lot Layout
 - Indicative Dwellings



FIGURE 4.
**Night-time Road
 Traffic Noise Levels**
 DOUBLE STOREY DWELLINGS

- Legend**
- 45 dBA LAeq (9 hour) Noise Effected
 - 55 dBA LAeq (9 hour)
 - Lot Layout
 - Indicative Dwellings



Table 1 Category 1: 'Deemed-to-Comply' Construction

Facade Element	Minimum Sound Insulation, Rw	Construction
Windows/ Sliding Doors	24	Openable with minimum 4 mm monolithic glass and standard weather seals.
External Walls	38	<p>Timber frame or cladding:</p> <ul style="list-style-type: none"> 6mm fibre cement sheeting or weatherboards or plank cladding externally, 90mm deep timber stud or 92mm metal stud, 13mm standard plasterboard internally. <p>Brick veneer:</p> <ul style="list-style-type: none"> 110mm brick, 90mm timber stud or 92mm metal stud, minimum 50mm clearance between masonry and stud frame, 10mm standard plasterboard internally. <p>Double brick cavity:</p> <ul style="list-style-type: none"> 2 leaves of 110mm brickwork separated by 50mm gap.
Roof/Ceiling	40	Pitched concrete or terracotta tile or metal sheet roof with sarking, 10mm plasterboard ceiling fixed to ceiling joists, R1.5 insulation batts in roof cavity.
Entry Door*	28	35 mm solid core timber door fitted with full perimeter acoustic seals.
Floor	29	1 layer of 19 mm structural floor boards, timber joist on piers. OR Concrete slab floor on ground.
*For dwellings at the Project site, acoustic seals would only be required where the entry door faces Ellerton Drive.		