



Selecting an Acoustic Sealing System

1. TYPE OF ROOM OF OCCUPANCY	2a. EXTERNAL NOISE		
	40 - 50 dBA <i>e.g. Quiet residential area with distant traffic noise / rainfall / creeks</i>	50 - 60 dBA <i>e.g. Urban area with traffic noise / distant train noise / quiet restaurants</i>	60 - 70 dBA <i>e.g. Urban area with significant traffic noise / retail activity / busy restaurants / industrial noise</i>
	2b. ADJACENT ROOM		
	40 - 50 dBA Transient <i>e.g. Corridors</i>	50 - 60 dBA Occupied <i>e.g. Offices / Classrooms</i>	60 - 70 dBA Occupied / Unoccupied <i>e.g. Music / Factories</i>
3. REQUIRED R_w RATING OF DOOR SEALING SYSTEM			
<ul style="list-style-type: none"> • Carparks • Control rooms • Factories 	R_w22	R_w25	R_w28
<ul style="list-style-type: none"> • Bars and lounges • Corridors and lobbies • Food courts • Service areas / utility rooms • Shopping malls / supermarkets • Stores 	R_w25	R_w28	R_w30
<ul style="list-style-type: none"> • Airports • Apartments¹ • Art studios • Boarding house rooms¹ • Cafés • Guest house rooms¹ • Gyms • Hotel rooms / motel rooms¹ • Intensive care wards • Laboratories • Libraries • Computer rooms • Living areas¹ • Meeting rooms • Offices • Recovery rooms 	R_w30	R_w30	R_w35
<ul style="list-style-type: none"> • Auditoriums • Bedrooms / sleeping areas¹ • Board rooms • Cinemas / home theatres • Classrooms • Consulting rooms • Convention centres • Court rooms • Delivery suites • Drama studios • Executive offices • Places of worship • Procedure rooms 	R_w30	R_w35	R_w40
<ul style="list-style-type: none"> • Drama studios² • Film or television studios² • Music practice / studio rooms² • Music recording studios² • Sound stages² • Voice over booth² 	R_w35+	R_w40	$R_w43 - 45$

¹ To be used with this guide for external door sealing solutions only. Refer NCC Part F5.5 (b) page 31.

² Rating of acoustic door to be acoustically designed by a suitably qualified acoustic engineer.

It must be noted that this table does not calculate the end design sound level (LAeq,t), but only the minimum required R_w rating of a door set.

It must also be noted that this table is a guide only and is not to take precedence over local building codes or standards. Consultation with an acoustic engineer should be considered when specifying solutions for noise problems.