



Note that the 2016 NCC requirement for **intertennancy** systems are:  
 Airborne – Rw + Ctr must be 50 or higher (Higher numbers are better)  
 Impact – Ln,w must be 62 or lower (Lower numbers are better)

Floor System	Nasahi Panel Size	Calculated Acoustic Performance		
		Airborne Rw (Ctr)	Impact Transmission Ln,w(Cl)	
			Tiles and 5mm thick rubber underlay	Carpet and foam underlay
<b>Option 1:</b> <ul style="list-style-type: none"> <li>▪ Nasahi Panel</li> <li>▪ 250mm deep timber joist</li> <li>▪ No insulation</li> <li>▪ One layer of 10mm standard plasterboard</li> </ul>	50mm	48(-6)	73 (-7)	46 (-5)
	62mm	48 (-5)	73 (-6)	46 (-5)
	75mm	49 (-5)	65 (-2)	43 (-3)
<b>Option 2:</b> <ul style="list-style-type: none"> <li>▪ Nasahi Panel</li> <li>▪ 300mm deep timber joist</li> <li>▪ No insulation</li> <li>▪ One layer of 10mm standard plasterboard</li> </ul>	50mm	48 (-5)	73 (-6)	46 (-5)
	62mm	49 (-5)	73 (-5)	46 (-5)
	75mm	49 (-5)	66 (-1)	42 (-2)
<b>Option 3:</b> <ul style="list-style-type: none"> <li>▪ Nasahi Panel</li> <li>▪ 250mm deep timber joist with resilient mounts and furrina channels</li> <li>▪ 75mm thick polvester insulation or equivalent glasswool</li> <li>▪ One layer of 13mm fire rated plasterboard</li> </ul>	50mm	61 (-4)	60 (-6)	36 (-4)
	62mm	62 (-5)	59 (-5)	36 (-4)
	75mm	62 (-4)	52 (-2)	31 (-2)
<b>Option 4:</b> <ul style="list-style-type: none"> <li>▪ Nasahi Panel</li> <li>▪ 300mm deep timber joist with resilient mounts and furrina channels</li> <li>▪ 75mm thick polvester insulation or equivalent glasswool</li> <li>▪ One layer of 13mm fire rated plasterboard</li> </ul>	50mm	61 (-4)	59 (-5)	36 (-4)
	62mm	62 (-4)	59 (-5)	36 (-4)
	75mm	62 (-4)	52 (-2)	31 (-2)
<b>Option 5:</b> <ul style="list-style-type: none"> <li>▪ Nasahi Panel</li> <li>▪ 250mm deep timber joist with resilient mounts and furrina channels</li> <li>▪ 75mm thick polvester insulation or equivalent glasswool</li> <li>▪ One layer of 16mm fire rated plasterboard</li> </ul>	50mm	61 (-4)	59 (-5)	36 (-4)
	62mm	61 (-3)	59 (-5)	36 (-4)
	75mm	62 (-4)	52 (-2)	32 (-3)
<b>Option 6:</b> <ul style="list-style-type: none"> <li>▪ Nasahi Panel</li> <li>▪ 300mm deep timber joist with resilient mounts and furrina channels</li> <li>▪ 75mm thick polvester insulation or equivalent glasswool</li> <li>▪ One layer of 16mm fire rated plasterboard</li> </ul>	50mm	61 (-3)	59 (-5)	36 (-4)
	62mm	61 (-3)	59 (-6)	36 (-4)
	75mm	62 (-4)	52 (-2)	32 (-3)
<b>Option 7:</b> <ul style="list-style-type: none"> <li>▪ Nasahi Panel</li> <li>▪ 250mm deep timber joist with resilient mounts and furrina channels</li> <li>▪ 75mm thick polvester insulation or equivalent glasswool</li> <li>▪ Two layers of 13mm fire rated plasterboard</li> </ul>	50mm	63 (-3)	59 (-7)	35 (-3)
	62mm	63 (-3)	58 (-6)	35 (-3)
	75mm	64 (-4)	50 (-1)	30 (-3)
<b>Option 8:</b> <ul style="list-style-type: none"> <li>▪ Nasahi Panel</li> <li>▪ 300mm deep timber joist with resilient mounts and furrina channels</li> <li>▪ 75mm thick polvester insulation or equivalent glasswool</li> <li>▪ Two layers of 13mm fire rated plasterboard</li> </ul>	50mm	63 (-3)	59 (-7)	35 (-3)
	62mm	63 (-3)	58 (-6)	35 (-3)
	75mm	64 (-4)	50 (-2)	30 (-3)



Floor System	Nasahi Panel Size	Calculated Acoustic Performance		
		Airborne R <sub>w</sub> (Ctr)	Impact Transmission Ln,w(CI)	
			Tiles and 5mm thick rubber underlay	Carpet and foam underlay
<b>Option 9:</b>				
▪ Nasahi Panel	50mm	63 (-4)	59 (-7)	35 (-3)
▪ 250mm deep timber joist with resilient mounts and furring channels				
▪ 75mm thick polvester insulation or equivalent glasswool	62mm	63 (-4)	58 (-6)	35 (-3)
▪ One layer of 13mm fire rated plasterboard and one layer of 16mm fire rated plasterboard	75mm	63 (-3)	50 (-1)	30 (-3)
<b>Option 10:</b>				
▪ Nasahi Panel	50mm	63 (-4)	59 (-7)	35 (-3)
▪ 300mm deep timber joist with resilient mounts and furring channels				
▪ 75mm thick polvester insulation or equivalent glasswool	62mm	63 (-4)	58 (-6)	35 (-3)
▪ One layer of 13mm fire rated plasterboard and one layer of 16mm fire rated plasterboard	75mm	63 (-3)	50 (-2)	30 (-3)
<b>Option 11:</b>				
▪ Nasahi Panel	50mm	62 (-3)	59 (-6)	35 (-4)
▪ 250mm deep timber joist with resilient mounts and furring channels				
▪ 75mm thick polvester insulation or equivalent glasswool	62mm	62 (-3)	59 (-6)	35 (-4)
▪ Two layers of 16mm fire rated plasterboard	75mm	62 (-3)	51 (-2)	31 (-4)
<b>Option 12:</b>				
▪ Nasahi Panel	50mm	62 (-3)	59 (-6)	35 (-4)
▪ 300mm deep timber joist with resilient mounts and furring channels				
▪ 75mm thick polvester insulation or equivalent glasswool	62mm	62 (-3)	59 (-6)	35 (-4)
▪ Two layers of 16mm fire rated plasterboard	75mm	63 (-3)	51 (-2)	31 (-4)
<b>Option 13:</b>				
▪ Nasahi Panel	50mm	65 (-3)	60 (-5)	34 (-3)
▪ 19mm particle board				
▪ 300mm deep timber joist with resilient mounts and furring channels				
▪ No insulation				
▪ One layer of 13mm fire rated plasterboard and one layer of 16mm fire rated plasterboard				
<b>Option 14:</b>				
▪ Nasahi Panel	50mm	63 (-5)	57 (-4)	31 (-2)
▪ 19mm particle board				
▪ 300mm deep timber joist with resilient mounts and furring channels				
▪ 75mm thick polvester insulation or equivalent glasswool				
▪ One layer of 13mm fire rated plasterboard and one layer of 16mm fire rated plasterboard				

Results are based on Renzo Tonin & Associates Report: TH736-01F02(R6)