



# Acoustic Performance

Acoustic performance is becoming more important as builders are needing to meet more stringent standards set by local certifiers in all aspects of the building. For this report, some of the acoustic related standards we have worked with include:

### Impact Sound Insulation

Measured to: ISO 717.2 - Rating of sound insulation in buildings and of building elements. Rated to: AS/NZS ISO 140.7 - Measurement of sound insulation in buildings and of building elements - Field measurements of impact sound insulation of floors.

### Impact Isolation Class

Measured to: ISO 717.2 - Rating of sound insulation in buildings and of building elements. Rated to: AS/NZS ISO 140.7 - Measurement of sound insulation in buildings and of building elements - Field measurements of impact sound insulation of floors. Calculated according to: ASTM E492-90 and ASTM E989-06.

It is challenging to provide acoustic information because every building provides unique results and there are a number of ways that a subfloor and ceiling can be constructed, which will each contribute more or less to the overall acoustic performance of the flooring system.

To provide as much information as possible, GH Commercial has partnered with an acoustic engineering firm to perform real-world site testing and then to use their expert opinion and modelling software to provide estimates of what many of the most common construction methods should achieve. This is to help the client understand how our product performs in order to make the best decisions possible as they select materials for their project. In situ/on site testing may still be required as this is the only way the actual acoustic rating of a specific installation can be determined. As a guide to interpreting the results shown in the following table, the lower the LnTw figure, the better the performance and for AIIIC, the higher the better.



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This document provides acoustic results for a range of GH Commercial products in various commercial and multi-residential applications. These acoustic values are indicative only. Each project should be assessed by the project's acoustic engineer to make sure your chosen product is suitable for the application.

Type	Flooring Construction (Certification Name)	Product Example	Underlay	Test Type	150mm Slab + 28mm Furrings + 10mm Plaster (model)	200mm Slab (model)	200mm Slab +28mm Furrings +10mm Plaster (model)	200mm Slab + R2.5 Insulation + 100mm Cavity + 28mm Furrings + 10mm Plaster (model)	250mm Slab + 28mm Furrings + 10mm Plaster (model)	270mm Slab + 28mm Furrings + 10mm Plaster (test)	300mm Slab (test)	Report #
Laminate	8mm Laminate (CN Construction)	Vista	2.0mm IXPE	Ln' Tw	51	55	50	47	49	49	-	6968-2.17
				AIIIC	53	49	54	55	55	55		
Laminate	8mm Laminate (EU Construction)	Amor Classic	2.0mm IXPE	Ln' Tw	51	55	50	47	49	49	-	6968-2.18
				AIIIC	52	48	53	54	54	54		
Hybrid	5.8mm Hybrid Construction	Apollo	Attached in manufacturing	Ln' Tw	51	55	50	47	49	49	-	6968-2.9
				AIIIC	52	48	53	54	54	54		
Hybrid	6.5mm Hybrid Construction (AH)	Apollo XL	Attached in manufacturing	Ln' Tw	50	54	49	46	48	48	-	6968-2.11
				AIIIC	53	49	54	55	55	55		
Hybrid	6.5mm Hybrid Construction (DS)	Metropol I500	Attached in manufacturing	Ln' Tw	51	54	49	46	48	48	-	6968-2.20
				AIIIC	53	49	54	55	55	55		
LVP/T	2.5mm CN Construction	Olympus DS	Nil	Ln' Tw	66	70	65	62	64	64	-	6968-2.1
				AIIIC	37	33	38	39	39	39		
LVP/T	2.5mm KR Construction	Regent DS	Nil	Ln' Tw	65	69	64	61	63	63	-	6968-2.2
				AIIIC	37	33	38	39	39	39		
LVP/T	2.5mm EU Construction	Moduleo	Nil	Ln' Tw	65	69	64	61	63	63	-	6968-2.3
				AIIIC	37	33	38	39	39	39		
LVP/T	4.5mm KR Construction	Regent DS Plus	Nil	Ln' Tw	63	67	62	59	61	61	-	6968-2.4
				AIIIC	40	36	41	42	42	42		
LVP/T	4.5mm EU Construction	Aquila DS Plus	Nil	Ln' Tw	65	69	64	61	63	63	-	6968-2.5
				AIIIC	38	34	39	40	40	40		
LVP/T	2.5mm CN Construction	Olympus DS	2mm Rubber	Ln' Tw	54	58	53	50	52	52	-	6968-2.1
				AIIIC	49	45	50	51	51	51		
LVP/T	2.5mm KR Construction	Regent DS	2mm Rubber	Ln' Tw	54	58	53	50	52	52	-	6968-2.2
				AIIIC	49	45	50	51	51	51		
LVP/T	2.5mm EU Construction	Moduleo	2mm Rubber	Ln' Tw	54	58	53	50	52	52	-	6968-2.3
				AIIIC	50	46	51	52	52	52		
LVP/T	4.5mm KR Construction	Regent DS Plus	2mm Rubber	Ln' Tw	53	57	52	49	51	51	-	6968-2.4
				AIIIC	50	46	51	52	52	52		
LVP/T	4.5mm EU Construction	Aquila DS Plus	2mm Rubber	Ln' Tw	53	57	52	49	51	51	-	6968-2.5
				AIIIC	50	46	51	52	52	52		
WOOD	14/3mm CN Construction (OAK)	Corsica Oak	2.0mm IXPE	Ln' Tw	52	56	51	48	50	50	-	6968-2.6
				AIIIC	51	47	52	53	53	53		
WOOD	14/3mm CN Construction (AUS)	Pioneer	2.00mm IXPE	Ln' Tw	53	57	52	49	51	51	-	6968-2.7
				AIIIC	50	46	51	52	52	52		
WOOD	14/3mm CN Construction (OAK)	Corsica Oak	2mm Rubber	Ln' Tw	53	57	52	49	51	51	-	6968-2.6
				AIIIC	50	46	51	52	52	52		
WOOD	14/3mm CN Construction (AUS)	Pioneer	2mm Rubber	Ln' Tw	55	59	54	51	53	53	-	6968-2.7
				AIIIC	48	44	49	50	50	50		
CARPET TILE	Loop Pile Nylon Carpet Tile	Territory	Nil	Ln' Tw	46	44	43	42	43	43	-	6968-3.1R
			Nil	a <sub>w</sub>	-	-	-	-	-	0.15 (H)	AC285-01-1	
CARPET TILE	Loop Pile Nylon Carpet Tile	Territory with cushion back	Attached	Ln' Tw	44	42	42	40	41	41	-	6968-3.2R
			Attached	a <sub>w</sub>	-	-	-	-	-	0.30	AC265-02-1	
CARPET TILE	Loop Pile Nylon Carpet Tile	Spectrum	Attached	NRC	-	-	-	-	-	-	0.25	AC265-02-1
			Nil	Ln' Tw	45	43	43	41	42	42	-	6968-3.3R
CARPET TILE	Loop Pile Nylon Carpet Tile	Spectrum with cushion back	Nil	a <sub>w</sub>	-	-	-	-	-	-	0.20 (H)	AC285-02-1
			Nil	NRC	-	-	-	-	-	0.2	AC285-02-1	
CARPET TILE	Loop Pile Nylon Carpet Tile	Spectrum with cushion back	Attached	Ln' Tw	42	40	40	38	39	39	-	6968-3.4R
			Attached	a <sub>w</sub>	-	-	-	-	-	0.35 (H)	AC273-01-1	
CARPET	17oz Cut Pile Nylon Carpet	Oceanic Sheet with cushion back	Attached	NRC	-	-	-	-	-	-	0.30	AC273-01-1
			Ln' Tw	35	33	33	31	32	30	-	6968-4.1R	
CARPET	22oz Textured Loop Pile Carpet	Custom	Attached	Ln' Tw	36	34	34	32	33	31	-	6968-4.2R
			AIIIC	64	66	66	68	66	69			