

# Recital® Core™ acoustic panels

## High performance sound absorption panels for semi exposed applications

### Description

Recital® Core™ is a thermally bonded polyester fibre acoustic panel engineered for high-performance semi-exposed use, offering effective sound absorption across a broad range of frequencies to control reverberation within building interiors. Recital Core has a firm surface finish with a soft core making it easy to handle and install. Available in 25 mm, 50 mm, 75 mm, and 100 mm thicknesses. Available in white, black and grey.

### Application

Recital Core is designed for installation behind perforated linings and ceilings to reduce reverberation in internal environments such as cinemas, sports halls, offices, hospitality, theatres, schools, gyms, audio suites and conference facilities, supporting improved acoustic comfort and speech clarity. It is also suitable for use in industrial enclosures and plant rooms. Recital Core is not suitable for fully exposed applications or where a decorative finish is required.

### Features and benefits

<b>(NRC) Acoustic Sound Absorption performance</b>	→	Minimises the impact of excessive noise by reducing sound transmission, providing a more comfortable and healthy work or living space.
<b>Meets the NCC fire performance requirements of AS/NZS 1530.3</b>	→	Offers peace of mind that product complies with NCC fire requirements.
<b>Made in Australia</b>	→	Local manufacturing means shorter lead times and lower environmental footprint throughout supply chain.

### Product data

Product name	Nominal thickness mm	Width mm	Length mm	Sheets per pack	M <sup>2</sup> per pack	Colour	Product code
Recital Core 20	25	1200	2400	12	34.56	Black	4021592
						White	4021594
						Grey	4021595
	50	1200	2400	6	17.28	Black	4021605
						White	4021606
						Grey	4021607
	75	1200	2400	4	11.52	Black	4021617
						White	4021618
						Grey	4021619
100	1200	2400	3	8.64	Black	4021629	
					White	4021630	
					Grey	4021631	

Product name	Nominal thickness mm	Width mm	Length mm	Sheets per pack	M <sup>2</sup> per pack	Colour	Product code
Recital Core 32	25	1200	2400	12	34.56	Black	4021596
						White	4021597
						Grey	4021598
	50	1200	2400	6	17.28	Black	4021608
						White	4021609
						Grey	4021610
	75	1200	2400	4	11.52	Black	4021620
						White	4021621
						Grey	4021622
	100	1200	2400	3	8.64	Black	4021632
						White	4021633
						Grey	4021634
Recital Core 48	25	1200	2400	10	28.8	Black	4021599
						White	4021600
						Grey	4021601
	50	1200	2400	6	17.28	Black	4021611
						White	4021612
						Grey	4021613
	75	1200	2400	4	11.52	Black	4021623
						White	4021624
						Grey	4021625
Recital Core 60	25	1200	2400	10	28.8	Black	4021602
						White	4021603
						Grey	4021604
	50	1200	2400	6	17.28	Black	4021614
						White	4021615
						Grey	4021616

### Other properties

Non-allergenic, low irritant, low flame response, resilient.

### Fire hazard properties

Recital Core exhibits the following characteristics when tested in accordance with the following standards:

Property	Test method/standard	Result
Group Number	AS 5637.1	Group 1
Early Fire Hazard Indices	AS/NZS 1530.3	0
Ignitability Index		0
Spread of Flame Index		0
Heat Evolved Index		0
Smoked Developed Index		5

## Compliance NCC 2022

When correctly specified and installed, the product complies with the below NCC clauses and relevant standards:

- Complies with the Group Number requirements of NCC 2022 Volume 1, S7C4 for wall and ceiling linings.
- When tested to AS/NZS 1530.3, this product does not exceed the 'Spread of Flame' or 'Smoke Developed' indices as required by NCC 2022 Volume 1, S7C7.

## Product limitations

- Not suitable in exterior applications exposed to external environmental conditions such as direct uv exposure, moisture or wind pressure during and after installation.
- This product is not classified to AS1530.1, and is not suitable where non-combustible material is required.
- Unfaced polyester panels are not water or vapour barriers and are not suitable where a water or vapour control is required.
- Check the ceiling framing and lining manufacturer's weight limitations prior to installation to ensure support of the additional weight of the product.

## Acoustic performance

### Sound absorption

The performance of sound absorption for acoustic panels is described by either the  $\alpha_w$  or the noise reduction coefficient (NRC). In sound absorption applications, the NRC is used as an acoustic performance measure. The higher the NRC, the greater the sound absorption at the representative frequencies. The NRC is the calculated average result of four frequencies: 250 Hz, 500 Hz, 1,000 Hz and 2,000 Hz. Recital Core acoustic sound absorption panels achieves the following sound absorption coefficients when tested in accordance with AS ISO 354:

Product	Density Kg/m <sup>3</sup>	Nominal thickness mm	Sound Absorption coefficients at frequencies (Hz) of:						NRC	$\alpha_w$
			125	250	500	1000	2000	4000		
Recital Core 20	20	25	0.07	0.23	0.48	0.62	0.71	0.78	0.5	0.5 (H)
		50	0.16	0.47	0.73	0.83	0.88	0.85	0.75	0.75
		75	0.24	0.65	0.89	0.98	0.89	0.93	0.85	0.9
		100	0.38	0.91	1	0.97	0.93	0.96	0.95	1
Recital Core 32	32	25*	0.09	0.25	0.55	0.74	0.85	0.92	0.6	0.55 (H)
		50*	0.16	0.48	0.82	0.96	1.02	1.07	0.8	0.8 (H)
		75	0.24	0.68	0.93	1	1.02	1.07	0.9	0.95
		100*	0.45	1.07	1.14	1.05	1.05	1.06	1.1	1
Recital Core 48	48	25	0.09	0.25	0.55	0.74	0.88	0.95	0.6	0.55 (H)
		50*	0.18	0.58	0.95	1.04	1.06	1.09	0.9	0.9
		75	0.35	0.89	1.05	1.01	1	1	1	1
		100	0.76	1.18	1.07	1	1	1	1.05	1
Recital Core 60	60	30	0.09	0.25	0.58	0.83	0.95	0.96	0.65	0.55 (MH)
		50*	0.17	0.65	1.01	1.06	1.06	1.1	0.95	0.95
		75	0.49	0.98	1.02	1	1	1	1	1
		100	0.93	1.11	1.01	1	1	1	1.05	1

\*Opinion derived from empirical data.

**Health and safety**

Manufactured from polyester fibre. Refer to the Safety Use Information Sheet (SUIS) for more information.

**Environmental properties**

- The product is safe to handle, non-irritant, non-toxic, and non-allergenic (confirmed in SUIS).
- The product is recyclable.

**Maintenance and conditions of use**

- When product is installed as per the product installation guidelines, no further maintenance is required for this product.

**Technical specification****When specifying, please state the following:**

The acoustic panel material must be Sonata Recital Core. The panel must achieve an NRC value \_\_\_\_\_ at a nominal thickness of \_\_\_\_\_ mm (specify panel thickness).