



## DATA SHEET – POLYMAX PRIME

### Polymax Prime:

- Developed to increase the low frequency acoustic characteristics of high-performance plasterboard, masonry and aerated concrete composite wall systems used in apartments and other multi-residential and commercial projects.
- Non-irritant and does not require any protective clothing or masks during installation.
- Odourless and contains no harmful volatile organic compounds (VOC).

### Applications

**Polymax Prime** is ideal for use in high-performance acoustic partition and ceiling systems and gives acoustic performance in such systems to comply with BCA acoustic provisions.

### Acoustic performance

**R<sub>w</sub>** means weighted sound reduction index. It is a single number used to describe the performance of a system – generally a wall – as a barrier to noise transmission.

An increase of one **R<sub>w</sub>** point is equivalent to a reduction of one decibel in noise level.

**ctr** is a spectrum adaptation factor that is used as a correction factor to **R<sub>w</sub>** and puts emphasis on low frequency sound transmission. The BCA mandates that party walls separating Single Occupancy Units (SOU) must have a minimum acoustic performance of **R<sub>w</sub> + ctr 50**.

**Polymax Prime**, when used in light-weight plasterboard, composite panel and masonry systems can increase the performance of such systems to meet or exceed the minimum requirements of the BCA. For more detailed information refer to the **Polymax Acoustic Design Guide**. See tables on reverse of this sheet for NRC ratings and wall examples.

### Environmental benefits

**Polymax Prime** is manufactured from thermally bonded polyester fibre with a minimum of 80% recycled fibre content from post-consumer PET packaging such as empty drink bottles. The product is 100% recyclable and has very high reuse potential as insulation.

- No chemicals or phenol formaldehyde resin binders are used in manufacture.
- Odourless and contains no harmful volatile organic compounds (VOC).
- No waste is generated in manufacture.
- No water or ozone-depleting gases are used in manufacture.
- No chlorides are present in the product.
- Martini's product stewardship programme can be viewed at [www.polymaxinsulation.com.au](http://www.polymaxinsulation.com.au)
- Suitable for use in Green Star™ projects.

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### Physical description and properties

<b>Volatiles:</b>	Nil		
<b>Specific Gravity:</b>	1.38		
<b>Flash Point:</b>	None allocated		
<b>Other Properties:</b>	Non-allergenic, low irritant, low flame response, resilient		
<b>Ingredients:</b>	Organic, long chain synthetic polymer		
<b>Max Service Temp:</b>	150°C		
<b>Alkalinity:</b>	pH 7.8 (pH 7 is neutral)		
<b>Moisture Absorption:</b>	Exposure to an atmosphere of 50°C & 95% RH for four days gives moisture absorption of less than 0.2% by volume		
<b>Fire Resistance:</b>	The following results were obtained when Martini Industries Polymax was subjected to early fire hazard testing in accordance with Australian Standards. AS 1530.3. Polymax meets all requirements of the BCA for all insulation applications	Ignitability	0
		Spread of Flame	0
		Heat Evolved	0
		Smoke Developed	0-1

### Product information

	R-Value	NRC*	Thickness mm	Roll width mm	Roll length m	Rolls per pack	M <sup>2</sup> per pack
<b>Polymax Prime 30</b>	R0.7	0.55	30	610	15	2	18.3
<b>Polymax Prime 50</b>	R1.1	0.65	50	610	10	2	12.2
<b>Polymax Prime 65</b>	R1.4	0.68	65	610	10	2	12.2
<b>Polymax Prime 75</b>	R1.6	0.72	75	610	10	2	12.2
<b>Polymax Prime 100</b>	R2.2	0.78	100	610	7	2	8.5

### Sample wall systems

The following are typical examples of high performance acoustic wall systems commonly used in multi-residential projects.

1) Rw 61, Rw + ctr 51\*

Two rows of 64mm decoupled steel studs set in separate tracks separated by 20mm gap with two layers of 13mm fire rated plasterboard to each external face with Polymax Prime 50mm fitted into one cavity.

2) Rw 62, Rw + ctr 51\*

One layer of 13mm fire rated plasterboard fixed to 28mm furring channel, 75mm Hebel Powerpanel, 35mm gap, 64mm steel studs, 1 layer 13mm fire rated Plasterboard, Polymax Prime 30mm in 28mm furring channel gap and Polymax Prime 75mm in the steel stud cavity.

\*Acoustic performance based on empirical data and expert opinion.

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