



# acoustica®

the quiet Australian

## **THE WORLD'S FIRST Water BASED ACOUSTIC NOISE BARRIER**

*Until now flexible mass loaded acoustic noise barriers have been produced from petrochemicals containing carbon that has been trapped for millions of years. At the end of life and upon their ultimate destruction these petrochemicals will lead to carbon emissions directly to the biosphere, which are extra to the natural carbon cycle. Strong evidence suggests that this leads directly to global warming.*

After many years of Research & Development, Acoustica have changed all that. We've changed the mix of ingredients of mass loaded noise barriers away from oil based petrochemicals and developed what is the world's first water based mass loaded Acoustic Noise Barrier. The result is QuietWave® an Australian and internationally patented noise barrier. Now there really is...

## **A Natural Environmental Choice**

**...for the replacement of mass loaded fossil fuel viscoelastic noise barriers**

Unlike traditional oil -based viscoelastic noise barriers which are mass loaded with PVC or ethylene and include harmful plasticisers, QuietWave® is a water based noise barrier that contains other naturally occurring organic materials and is fully biodegradable.

In developing the QuietWave® viscoelastic acoustic noise barrier we have adopted the principles of green chemistry, also called sustainable chemistry, which is a philosophy of chemical research and engineering that encourages the design of products and processes that minimize the use and generation of hazardous substances. Green chemistry seeks to reduce and prevent pollution at its source. It aims to avoid problems before they happen.

Acoustica's QuietWave® acoustic noise barrier isolates noise and dampens sound vibration to increase sound transmission loss. The vibration decay in Acoustica's organic QuietWave® viscoelastic noise barrier parallels the theoretical performance of the ideal limp mass barrier.

Acoustica's QuietWave® green chemistry acoustic noise barrier is available in weights from 1.5kg/m<sup>2</sup> to 10kg/m<sup>2</sup> with wall thickness from 1mm to 4.5 mm and is incorporated into Acoustica's range of acoustic products for wall/partition, floor, ceiling and pipe lagging.

The development of the world's first natural organic noise barrier has been achieved with a matching acoustic performance of RI,cw 29 for the 7kg/m<sup>2</sup> Quietwave® and RI,cw 23 for the 2.5kg /m<sup>2</sup> (Wilkinson & Murray test report).

QuietWave® has been certified by the CSIRO Division of Materials Science and Engineering as Group 1 fire rated (in accordance with Specification A2.4 of the Building Code of Australia) and with an average specific extinction area: 49.0 m<sup>2</sup>/kg (Refer to Specification C1.10a section 3(c) of the Building Code of Australia.)

## **QuietWave® The natural Environmental Choice**

- ✓ Green Chemistry
- ✓ Water Based
- ✓ Natural Organic
- ✓ Biodegradable

**The natural alternative to traditional mass loaded noise barriers**

- Carbon Chemistry
- Fossil Fuels
- Disposal Problems
- Harmful/Toxic Substances

**NZ Distributor, Advanced Acoustics Ltd, 41c William Pickering Drive, Albany, Auckland 0632**

**Mobile: 021 0615802 • [info@advancedacoustics.co.nz](mailto:info@advancedacoustics.co.nz)**

[www.advancedacoustics.co.nz](http://www.advancedacoustics.co.nz)