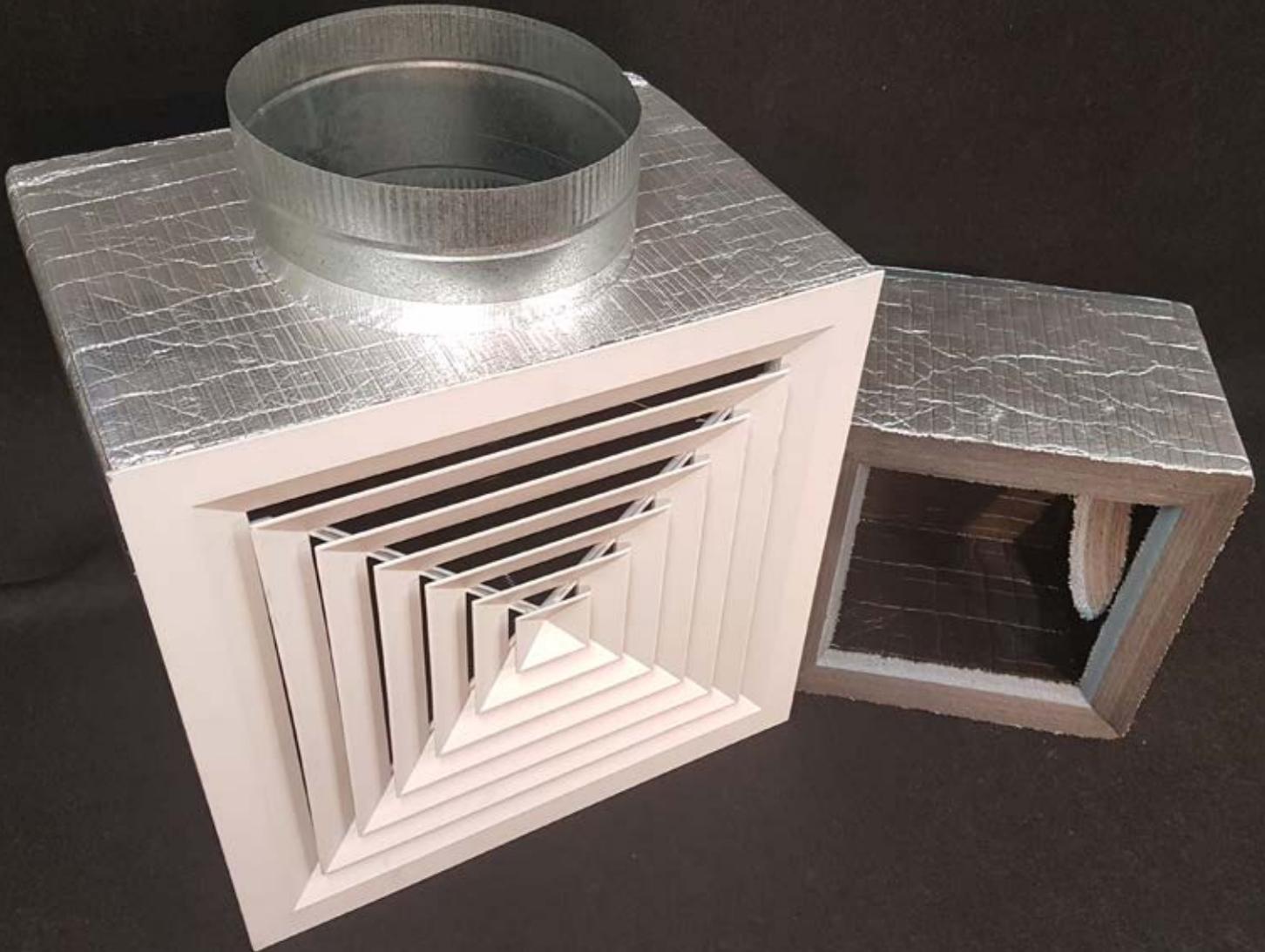


# **THERMOBREAK<sup>®</sup> Acoustibox**

**THERMAL/ACOUSTIC CUSHION HEAD AND PLENUM BOXES**



Thermobreak<sup>®</sup> Acoustibox cushion head and plenum boxes are thermally and acoustically insulated transitions that remove the need for heavy steel. The Thermobreak<sup>®</sup> Acoustibox range is Australian made using an innovative proprietary insulation composite that provides a unique 3 in 1 product solution.

**SEKISUI**

**FOAM**  
**INTERNATIONAL**  
Global Foam Solutions

**PHYSICALLY**  
**CROSSLINKED**  
SEKISUI TECHNOLOGY

# A New Generation Cushion Head & Plenum Box Solution

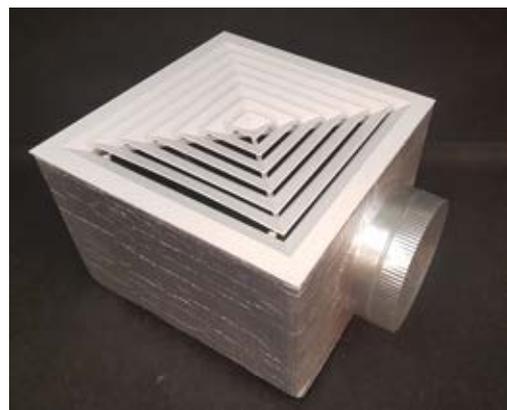
Thermobreak® Acoustibox is a new generation physically cross-linked polyolefin foam based cushion head and plenum box material. It is fibre-free and meets international fire and smoke standards. It demonstrates excellent acoustic properties and has extremely low water absorption thus preventing mould growth and odours commonly associated with fibrous based duct lining. Thermobreak® Acoustibox is supplied pre-assembled or as a flat pack unit for easy assembly on site.

## Lightweight & Easy to Install

The lightweight Thermobreak® Acoustibox is easy to transport, handle and install, especially when compared to traditional sheet metal boxes that can weigh up to 9.5 kilograms per unit.

Product	Weight
Thermobreak Acoustibox R1.0	2.3kg
Thermobreak Acoustibox R1.2	2.5kg
Thermobreak Acoustibox R2.0	3.4kg
Sheet metal box (0.6mm PGI steel)	9.5kg

\* Above weights are for standard 595 x 595 x 450mm high box, fully assembled with galvanised spigot (does not include grille weight).



## Health, Safety & the Environment

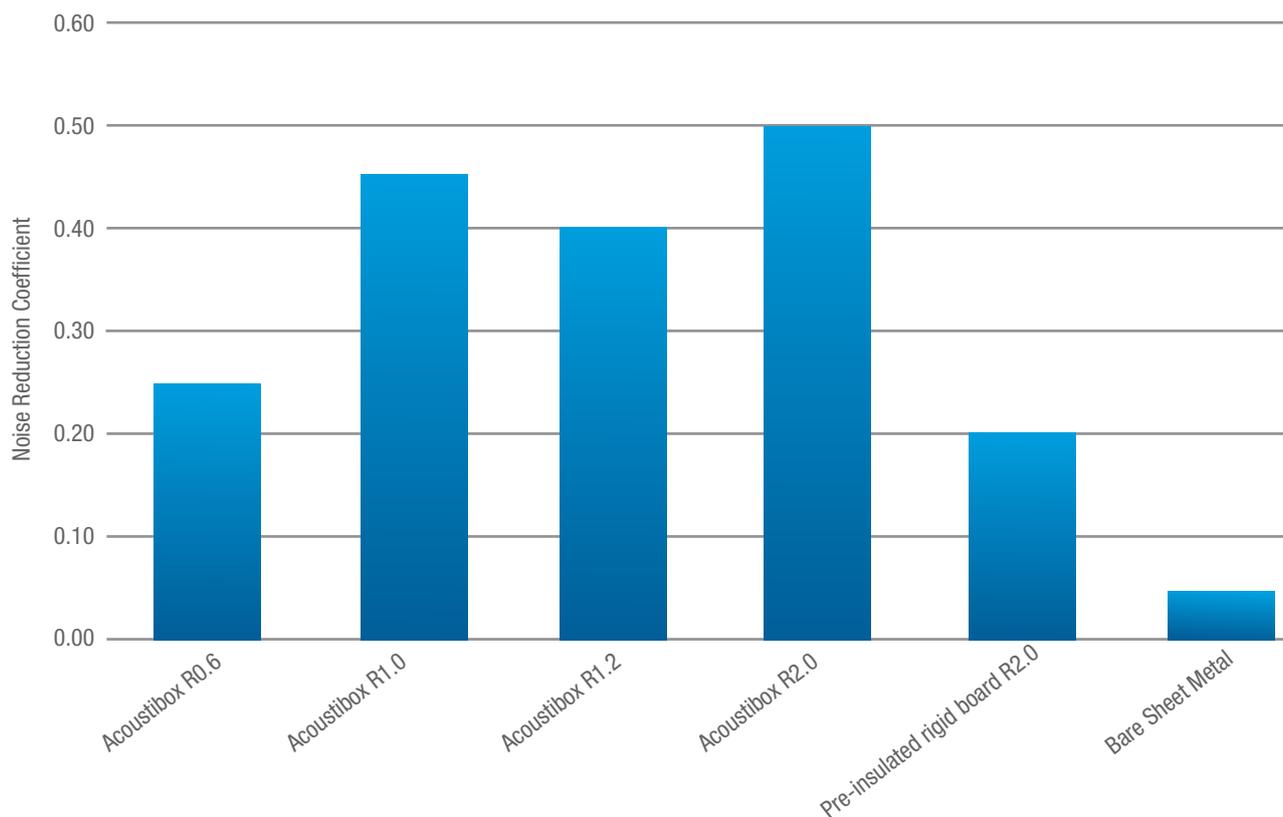
- Completely user friendly and does not emit fibres or dust during installation or in service.
- Non-irritant, odourless and does not support mould growth.
- Anti-Microbial & Low VOC for improved indoor air quality.
- Green Star compliant, Low Global Warming Potential (GWP), made without ozone destroying agents such as CFCs or HCFCs.
- Manufactured under a certified ISO 14001 Environmental Management System.



# Thermobreak Acoustibox Features

- Thermobreak® Acoustibox products are lightweight eliminating the need for rafter rod supports.
- Manufactured in a range of thicknesses complying with NCC Thermal R values.
- Noise attenuation that noticeably reduces loudness when compared to traditional boxes.
- Robust and strong allowing for ease of installation with minimal damage.
- Manufactured to fit the neck of all common registers with the option to tailor a unique design for more complex grilles.
- Can be supplied flat packed in a two component pack for cost saving on transport or pre-assembled.

Insulation Noise Reduction Coefficients (ASTM C423)



# THERMOBREAK<sup>®</sup> Acoustibox

## THERMAL/ ACOUSTIC CUSHION HEAD AND PLENUM BOXES

### Technical Data

Typical attenuation properties for Thermobreak<sup>®</sup> Acoustibox

Frequency	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
Thermobreak Acoustibox R0.6 - attenuation (dB)	1.0	1.3	1.8	4.4	3.9	4.2
Thermobreak Acoustibox R1.0 - attenuation (dB)	1.2	1.6	3.3	6.3	5.3	5.3
Thermobreak Acoustibox R1.2 - attenuation (dB)	1.3	1.7	3.6	4.5	5.6	4.4
Thermobreak Acoustibox R2.0 - attenuation (dB)	1.4	2.6	6.5	3.6	5.2	4.4
Bare Sheet Metal - attenuation (dB)	1.1	1.1	1.2	1.2	1.2	1.5

Above data relates to 595mm x 595mm x 450 mm high cushion head box. Significantly improved attenuation will be achieved with decreasing box dimensions. Note that Relative Loudness (RL) can be calculated using the following equation:  $RL = \sqrt{(10^{-(dB/10)})}$ , where dB = improvement (increase) in noise attenuation. Therefore a 3dB improvement in noise attenuation equates to a 29% reduction in loudness.

### Typical Properties

Resistance To Fungi (ASTM G21)	Zero Growth
Operating Temperature	-80° C to 100° C
Fire Compliance	AS1530.3 : 0, 0, 0, 0-1 UL 181.11
Maximum Recommended Design Air Velocity	20.3 m/s (4000 fpm)
VOC Emission Rate (ASTM D5116)	Low VOC Emitting ("Green Star")

### Size Availability

Thermobreak<sup>®</sup> Acoustibox material is supplied in pre-cut boxes and is available as a pre-assembled box or flat packed for easy on site assembly.

Standard Product Range	Acoustibox R0.6	Acoustibox 1.0	Acoustibox R1.2	Acoustibox R2.0
Wall Thickness	22mm	35mm	42mm	66mm

\* Other thicknesses are available on request.



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