



Acoustisorb HVAC

HVAC Insulation Products



Product Description

Acoustisorb HVAC is a bonded polyester insulation product designed to give optimal acoustic absorption and thermal resistance. It is laminated either with perforated (for internal lining) or heavy weight foil (for external lagging). Acoustisorb HVAC is manufactured in compliance with AS/NZS 4859.1. For more information physical properties and material safety data please refer to the Tontine Bonded Polyester Products Material Safety Data Sheet.

Applications

Acoustisorb HVAC Low Density (LD) is used for external lagging of ductwork, piping and tanks gives a thermal performance in compliance with AS 4859.1 Acoustisorb HVAC Medium Density (MD) and High Density (HD) used for internal lining of ductwork gives acoustic absorption over a broad frequency range and is designed to absorb mechanical noise from fans and chillers and other equipment. Where ductwork is lined there is also a thermal performance benefit. By adding the R value of the internal lining material to the R value of the external lagging material gives flexibility in thermal design to comply with AS 4859.1. Note that the quoted R-Value for Acoustisorb HVAC is for the insulation material only. The Building Code of Australia requires insulation of ducting to achieve a certain 'Total R-Value'. To estimate the Total R-Value of ductwork lined with Acoustisorb HVAC, add 0.15 to the quoted R Value.

Standard R-Values and Sizes

R-Value	Nominal Thickness (mm)	Length (m)	Width (mm)	Number Per Pack
ACOUSTISORB LD ROLLS				
R0.6	25	15	1200, 1500	1
R1.0	40	12	1200, 1500	1
R1.2	50	10	1200, 1500	1
R1.6	65	8	1200, 1500	1
R1.9	75	8	1200, 1500	1
ACOUSTISORB MD ROLLS				
R0.7	25	15	1200, 1500	1
R1.4	50	12	1200, 1500	1
ACOUSTISORB MD SHEETS				
R0.7	25	2.4	1200	10
R1.4	50	2.4	1200	5
ACOUSTISORB HD ROLLS				
R0.7	25	10	1200, 1500	1
ACOUSTISORB HD SHEETS				
R0.7	25	2.4	1200	10
R1.5	50	2.4	1200	3

Non-standard sizes can be manufactured to order upon request.
For more information please call 1300 TONTINE or your Tontine representative.

Acoustic Performance

Acoustic results are based on tests in accordance to AS1045 (**highlighted in bold**) and acoustic opinions as indicated on the table.

	SOUND ABSORPTION COEFFICIENTS @ FREQUENCIES					
Acoustisorb HVAC MD	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	NRC
Perf Foil 25mm	0.17	0.43	0.82	1.01	1.03	0.80
Perf Foil 50mm	0.37	0.75	1.07	1.08	0.94	0.95
Al Foil Trilam 50mm	0.26	0.68	1.10	0.92	0.60	0.80
Acoustisorb HVAC HD	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	NRC
Perf Foil 25mm	0.20	0.40	0.76	0.97	1.05	0.80
Perf Foil 50mm	0.46	0.78	1.05	1.06	0.95	0.90



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Standard Facings

Tontine Acoustisorb HVAC can be faced with either heavy weight perforated foil (HWPF) or heavy weight foil (HWF).

Fire Resistance

When tested in accordance with AS1530.3 (1999), "Early Fire Hazard Properties of Materials", exhibits the following characteristics:

Ignitability Index	0
Spread of Flame Index	0
Heat Evolved	0
Smoke Developed Index	0 - 3

Moisture Resistance

Exposure to an atmosphere of 50°C and 95% relative humidity for 4 days results in less than 0.2% by vol moisture absorption.

Maximum Service Temperature

The maximum service temperature for Acoustisorb HVAC is 70°C due to the tolerance of the facing adhesive.

Environmental and Health Benefits

Recycled Fibre Content	80% minimum
Volatile Organic Compounds (VOC's)	No harmful VOC's
Formaldehyde Content	Nil
Phenol Content	Nil
Ammonia Content	Nil
Ozone Depleting Potential (ODP)	Nil
Chloride Content	Nil
Total Recyclable Content	100%

How to Specify

The insulation material shall be Tontine Acoustisorb HVAC LD, MD or HD "R-Value" (from R0.6 to R1.9 as indicated in the standard product range) as manufactured by Tontine Fibres. Please specify the facing material required - Heavy Weight Perforated Foil (HWPF) or Heavy Weight Foil (HWF).

General Installation Advice

Tontine Acoustisorb HVAC is safe and easy to install around ducts, pipes, vessels or tanks. Tontine Acoustisorb HVAC products are easily torn or cut with a pair of industrial scissors, shears or angle grinders/rotary cutters for higher density products. For installation where weld pins are used, hold the insulation over the head of the pin and tap with a rubber mallet to force it through. No special clothing, gloves or masks are required for installation. Allow up to one month for products subjected to compression packing to recover to nominal thickness.

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In most cases product testing has been conducted in laboratory situation under controlled conditions. Site-measured performance may vary due to installation quality and site conditions. Thermal testing has been carried out in accordance with AS/NZS 4859.1, and acoustic testing in accordance with AS1045 or AS1191 in certified reverberation rooms. As these products are subject to constant research and development, we reserve the right to update the contents without notice. Recommendations regarding the use of products are to be taken as a guide only, and the purchaser should independently determine the suitability of a product for the intended application.

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