

|             |                                |
|-------------|--------------------------------|
| category    | <b>soundproofing</b>           |
| description | <b>acoustic curtain/drapes</b> |
| part code   | <b>custom order only</b>       |



**ACOUSTIC CURTAIN** is an acoustic composite manufactured from acoustic fibreglass insulation and a polymeric barrier with absorptive and barrier elements encapsulated with vinyl facings.

The fibreglass insulation provides both excellent sound absorption and thermal insulation. The composite is manufactured using three layers of fibreglass with a density of 22kg/m<sup>3</sup>.

Each layer of insulation is quilted to enhance its durability.

A 5kg/m<sup>2</sup> polymer-based synthetic membrane is laminated within the fibreglass layers. This membrane acts as a sound or noise barrier, thus reducing the transmission of noise.

The insulation is faced with tough vinyl comprising cloth coated in PVC rubber on both sides. The vinyl facing is wrapped around the edges of the composite and stitched to ensure the fibreglass insulation and polymeric barrier are protected from its working environment.

The vinyl facing is designed for continuous use at temperatures up to 120°C. It is available in black or grey. Heavy duty 'Tarp' material in a wide range of colours is also available for long term external applications.

The quilts are highly flexible and can be supplied with various fixing options including eyelets and Velcro for installation.

### Technical Specification

| Product     | Acoustic curtain/drapes           |
|-------------|-----------------------------------|
| Description | Composite                         |
| Size        | Bespoke                           |
| Weight      | Barrier core - 5kg/m <sup>2</sup> |
| Thickness   | Variable                          |

### Applications

Acoustic drapes are widely used in a variety of vehicle applications including the engine bay and chassis of buses, earth moving equipment, forklift trucks etc.

They are also used in industry for acoustic enclosures and screens for the reduction of noise from pumps, fans, compressors and vacuum units.

A use has also been found in the agricultural and farming industry in farm buildings to compartmentalise large open spaces. This facilitates the creation of different temperature zones within a space, thus enabling fresh produce to be packed or stored in optimum conditions for each growing season.

Acoustic curtains are also used in underground railway stations to create a barrier to noise travelling up stairwells and escalators during refurbishment works and on construction sites to control noise escaping into the surrounding environment.

As well as blocking sound they can help reduce the volume of dirt and dust migrating between different work areas.

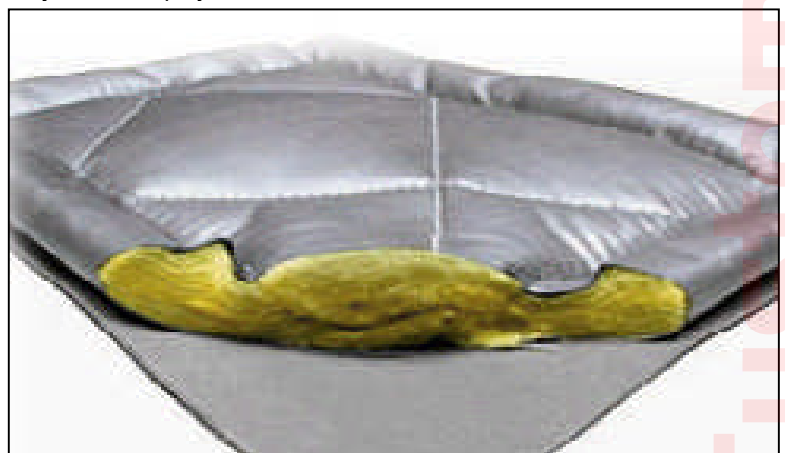
### Finishes

Curtains for use in *thermal* insulation applications are generally manufactured with a washable black or grey PVC coated nylon fabric.

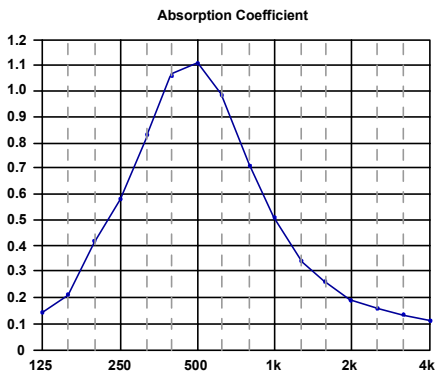
Curtains for use in *acoustic* insulation applications are generally manufactured with a black acoustically transparent glass cloth fabric. Other fabric finishes, including your own printing and colours, are available subject to enquiry and minimum

### Advantages

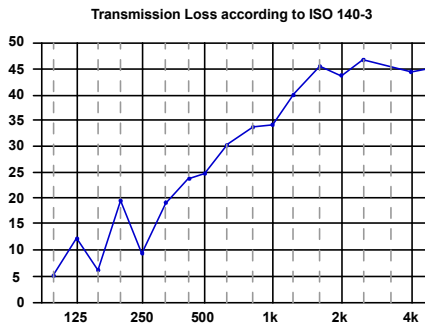
- Totally bespoke
- Quick and easy installation
- Re-usable
- Portable
- High acoustic performance
- Can be made waterproof for external use
- Can be supplied flat pack



## Acoustic Performance



| Frequency (Hz) | Absorption Coefficient |
|----------------|------------------------|
| 100            | 0.14                   |
| 125            | 0.15                   |
| 160            | 0.21                   |
| 200            | 0.42                   |
| 250            | 0.58                   |
| 315            | 0.81                   |
| 400            | 1.06                   |
| 500            | 1.11                   |
| 630            | 0.98                   |
| 800            | 0.71                   |
| 1000           | 0.51                   |
| 1250           | 0.34                   |
| 1600           | 0.25                   |
| 2000           | 0.19                   |
| 2500           | 0.16                   |
| 3150           | 0.14                   |
| 4000           | 0.11                   |
| 5000           | 0.10                   |



| Frequency (Hz) | R (dB) |
|----------------|--------|
| 100            | 5.0    |
| 125            | 12.2   |
| 160            | 6.3    |
| 200            | 19.5   |
| 250            | 8.8    |
| 315            | 19.0   |
| 400            | 23.7   |
| 500            | 24.9   |
| 630            | 31.2   |
| 800            | 33.9   |
| 1000           | 34.1   |
| 1250           | 41.2   |
| 1600           | 45.4   |
| 2000           | 43.5   |
| 2500           | 46.7   |
| 3150           | 45.5   |
| 4000           | 44.4   |
| 5000           | 44.8   |

