Siderise WPM acoustic wall lining system

Siderise WPM Impact resistant sound absorbing wall and ceiling lining system to help reduce sound pressure build-up around plant, machines, test rigs, air conditioning units etc.

Siderise WPM acoustic lining is a low cost fully protected sound absorbing panel lining system for walls and ceilings, offering many unique advantages.



The system comprises of 3 component parts: WPM panel unit, WPM retaining channel, and the removable WPM cover strip.

Description / Grades

Siderise WPM acoustic lining incorporates a WPM panel unit consists of a cassette tray formed from perforated metal containing the sound absorbent core.

The dense rockfibre core is of a special construction to provide improved impact resistance. As standard the core is faced on both surfaces with a non-woven glass fabric to provide anti-dusting characteristics whilst remaining acoustically transparent.

Alternative membranes or film enclosed options for special applications or external use are also available.

As standard all the metal components of the system are manufactured from galvanised mild steel. Versions based on stainless steel or aluminium are available to special order.

Applications

Siderise WPM acoustic lining standard system is ideally suited to a wide range of industrial applications requiring sound absorbing linings. These include: plant rooms, machine enclosures, general factory areas, test rigs, etc.

Versions of the system are available for various special applications these include: external linings, food & electronic process areas and wet or dirty areas. These systems normally incorporate film enclosed cores and consequently may be pressured washed.

The system can be provided in decorative forms, typically polyester powder coated to a specific RAL colour. Design options are further extended by the availability of special panel sizes & perforation patterns. Matching custom made finishing and edging trims are also available.



Benefits

- Simple to install.
- Direct fix system.
- Panels easily removed.
- Good impact resistance.
- Wide range of finishes and thickness.
- Excellent acoustic performance.
- Core Classified 'Reaction to Fire' A2-s1, d0.

Acoustic performance

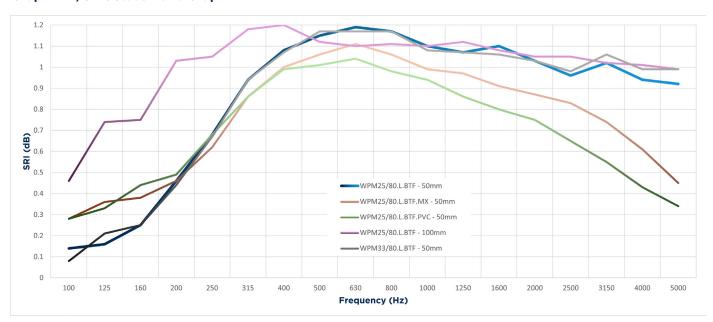
Given the large number of available options offered by the Siderise WPM system we recommend you contact our technical section for detailed sound absorption data for the specific system under consideration. The indicative values in Table 1 relate to the Standard system direct mounted to concrete and exclude any specialist enclosing film.

Table 1 - Acoustic performance

Material Thickness	Practical Absorption Coefficients					
	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz
50mm	0.20	0.70	1.00	1.00	1.00	0.95
75mm*	0.40	0.90	1.00	1.00	1.00	1.00
100mm	0.65	1.00	1.00	1.00	1.00	1.00

^{*} Interpolated results.

Graph 1 - 1/3rd Octave Band Graph





External Application of Siderise WPM System







Dimensions*

Siderise WPM panel unit: 1000 x 600mm Retaining channel: 57/55/25mm x 2.5m long Cover strip: 7/45/7mm x 2.5m long

Fire Performance (Core)

EN 13501-1:2018 A2-s1, d0

Maintenance

The system readily allows for the subsequent removal of individual panels for maintenance or replacement purposes.

Periodic cleaning would normally consist of wiping the panel face with a slightly damp cloth or light vacuuming.

Internal Application of Siderise WPM System on Walls and Ceilings







 $^{^{}st}$ Based on 50mm thick, alternative thickness and sizes are available to order.

Installation

The following describes installation to a flat wall surface (ceiling installation is similar).

The main retaining channels are attached to the wall at 1005mm centres to form a series of horizontal trays. The topmost channel is inverted and should be fitted to provide a 980mm clear opening.

The Siderise WPM panels are fitted vertically between the channels and are close butted together.

The panels are locked into position by the action of fitting the cover strip (see vertical section below).

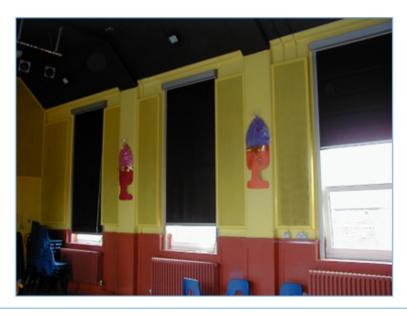
The cover strips are attached to the retaining channels by means of self-tapping screws or blind rivets (if subsequent easy removal of the panels is not anticipated).

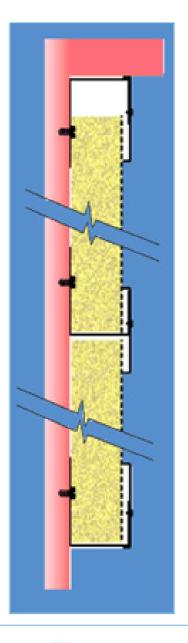
No vertical supports are required other than the use of the retaining channel and cover strip at corners or finishing points.

Typical detailing is available for most common installation conditions from our technical department.

Internal Application of Siderise WPM with Polyester Powder Coated panels and cover strips









Technical specification

Form Supplied	WPM Panels 1000mm x 600mm, WPM Retaining Channels, WPM Cover Strips		
Colour	Plain Galvanised Steel (other RAL colour options available)		
Core Finish	Black non-woven glass tissue as standard		
Thickness	50mm, 75mm or 100mm		
Fire resistance performance	None - Acoustic only		
Reaction to Fire (Core only)	A2-s1, d0 (EN13501 classification)		

Products available

The following Siderise products for use in suspended ceiling voids are available and can also be specified using NBS Plus:

- Siderise CLS system, inc WPM Core (CLS5).
- Siderise Acoustic Foam, type 'V' & 'M'.
- Siderise MC Mullion over clad system.
- Siderise FLX flexible acoustic barriers.
- Siderise CBX flexible acoustic barriers.
- Siderise CVB (CVB/LAM, CVB/P) acoustic void barriers.
- Siderise RF cavity barriers / fire stops for raised access floors.

Contact us for a copy of our Siderise ceiling void barrier range brochure.

Further information

Technical support

For further information please contact our technical team at the address below.

Available CPD's

Contact Siderise for further information on our CPDs:

- Siderise Acoustic Products for Commercial Interiors Architect Edition
- Siderise Acoustic Products and Performance with 1/3rd Octave Data Acoustic Consultants Edition

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