SUPERLAG® Rw

CMSDANSKIN ACOUSTICS

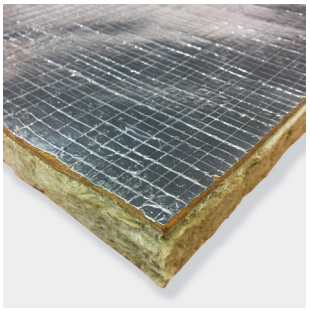
Technical Data Sheet

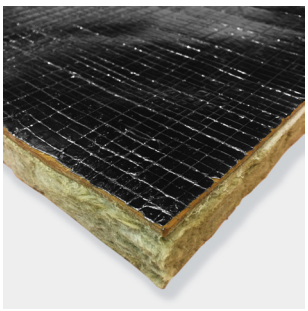
PRODUCT

SUPERLAG® Rw features an isolation layer of stitch reinforced mineral fibre laminated to a flexible dense acoustic barrier with a foil facing.

SUPERLAG® Rw is a highly flexible material consisting of a three part laminate incorporating a spacer or isolating layer, a very flexible heavy mass layer and an outer vapour barrier. It overcomes the need for a separate isolation layer normally required beneath most forms of acoustic lagging. It is a highly efficient acoustic insulation for ductwork, pipes, enclosures and similar applications where a considerable reduction in the passage of noise is required combined with ease of application.

It is manufactured using a special mineral fibre which is quilted to a zig zag reinforcement pattern in order to prevent both fibre migration and delamination and to provide stabilisation of the fibre preventing the fibres from settling.





FEATURES and BENEFITS

- The isolation layer reduces the transfer of sound and vibration excitation from transmitting from the noise source to the high mass barrier, it also provides a flexible high level of sound absorption thus absorbing noise emitted from the surface.
- Highly durable.
- Highly Flexible.
- Suitable for installation on smaller pipes.
- Reaction to Fire (EN 13501-1) B-s1,d0
- The super flexible acoustic barrier reflects the sound energy back into the mineral fibre to be further absorbed.
- Available in various weights and thicknesses to meet the sound reduction requirements of a range of applications and specification requirements.
- The product is dimensionally stable under various conditions of temperature and humidity.
- Excellent acoustic performance & low thermal conductivity.
- Compatible with a wide and varied range of surfaces that it is likely to be used on.
- Simpler installation than comparable multi component systems.
- Applied as a single layer treatment or the low frequency performance can be further enhanced by first applying CMS Danskin Acoustics DS10 damping sheet.

PRODUCT REFERENCE

SUPERLAG® Rw 5/25, 5/50, 10/25, 10/50

AS STANDARD

5/25 overall nominal thickness 28mm weight / m^2 = 6.9Kg

5/50 overall nominal thickness 51mm weight / m^2 = 8.5Kg

10/25 overall nominal thickness 31mm weight / m^2 = 11.9Kg

10/50 overall nominal thickness 53mm weight / m^2 = 13.8Kg

All sheet sizes are 2 x 1.2m

OPTIONS

Available with a silver coloured Aluminium foil outer vapour barrier as standard or black coloured foil to order.

INSTALLATION GUIDELINES

The method required in the fitting of SUPERLAG® Rw acoustic insulation is dependent on several factors.

- The size and circumference of the duct or pipe.
- The shape of the duct rectangular or round.
- The temperature externally and temperature within the duct, normal and maximum.
- The location of the duct, inside or outside.

Circular Ductwork

Round Ducts where one sheet of SUPERLAG® Rw will completely lap the circumference can be installed without the need of adhesives or extra mechanical fixings.

The SUPERLAG® Rw should be cut 50mm oversize and a 50mm strip of the mineral fibre removed to create an overlap.

All cutting can be carefully completed using a sharp knife.

Mating edges should be sealed with foil faced adhesive tape to match the finish required.

The tape should be a minimum of 75mm wide.

The SUPERLAG® Rw insulation can be secured to circular ducts and pipes using proprietary banding systems in conjunction with Class 0 tape.

Rectangular Ductwork

Rectangular ducts normally require additional support for the SUPERLAG® Rw in the form of contact adhesive, weld pins or proprietary insulation fixings particularly on the underside where the SUPERLAG® Rw will tend to hang away from the duct surface.

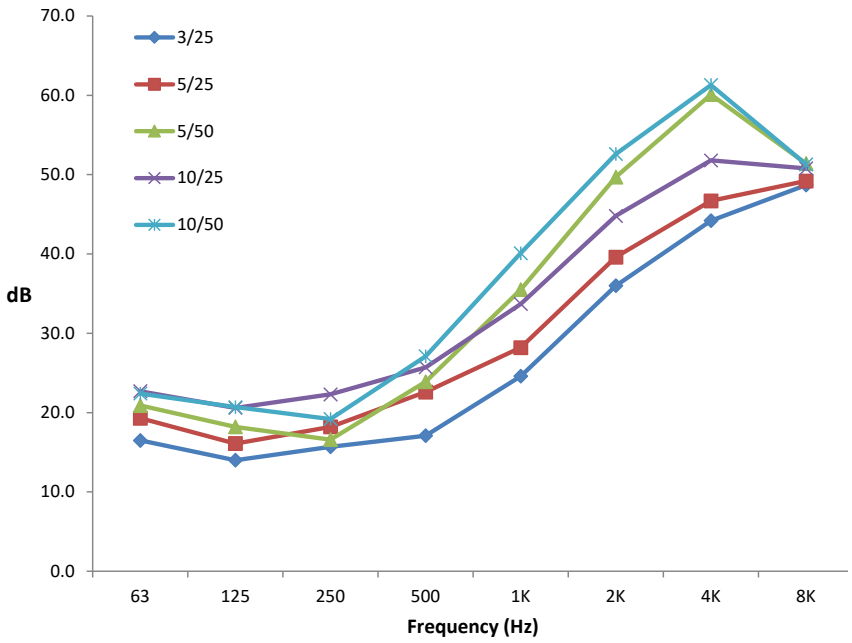
It is recommended that on very large intricate ducts the SUPERLAG® Rw can be further supported and reinforced with 25mm wire mesh and wire ties.

Banding rectangular ductwork is not recommended as insufficient support is given across the sides of the duct and the SUPERLAG® Rw will be compressed at the corners thus affecting the performance.

For external applications, an outer protective membrane of PIB or the application of a felt or other protective membrane is recommended.

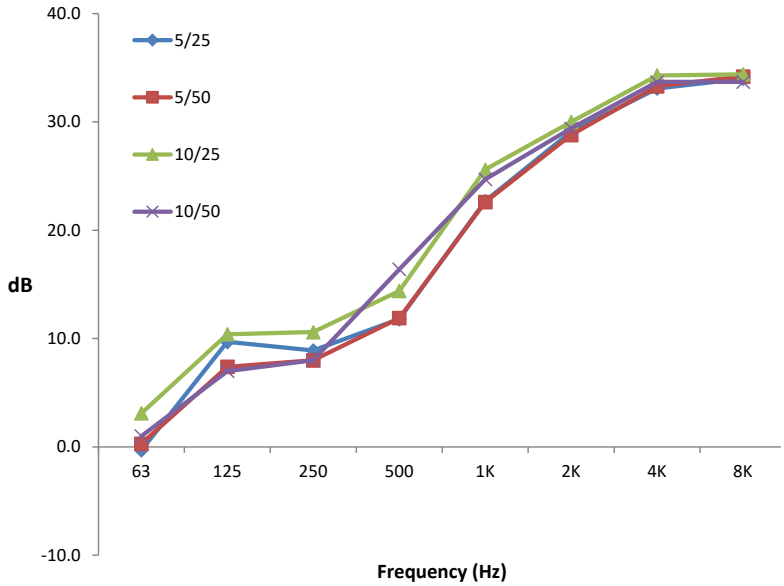
SUPERLAG® Rw

Material	Frequency								R_w	SRI
	63	125	250	500	1K	2K	4K	8K		
3/25	16.5	14.0	15.7	17.1	24.6	36.0	44.2	48.7	24	23
5/25	19.3	16.1	18.2	22.6	28.2	39.6	46.7	49.2	28	27
5/50	20.9	18.2	16.6	23.9	35.5	49.7	60.1	51.4	28	31
10/25	22.7	20.6	22.3	25.7	33.7	44.8	51.8	50.8	32	31
10/50	22.4	20.7	19.2	27.1	40.1	52.6	61.3	51.3	31	34



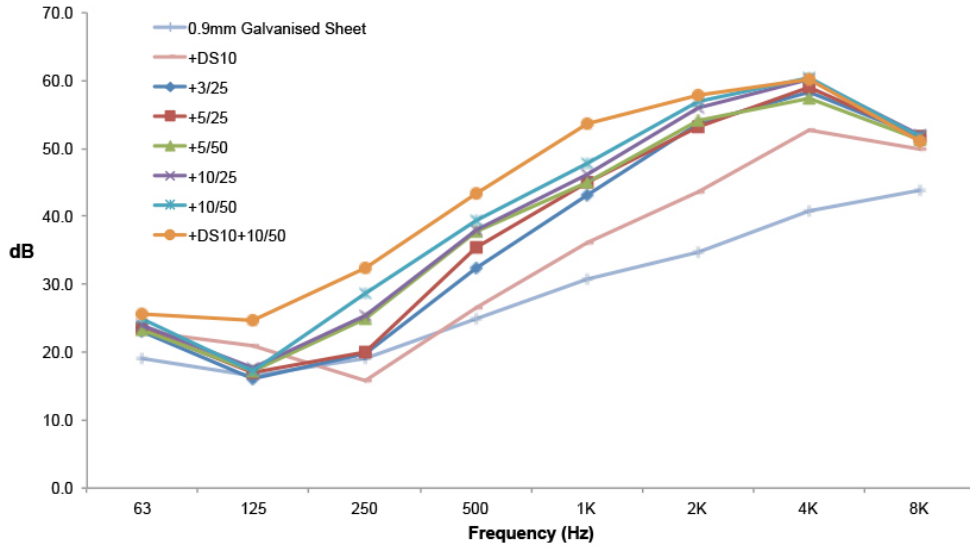
SUPERLAG® Rw - 315mm diameter Duct Breakout Insertion Loss (non-UKAS accredited)

Material	Frequency							
	63	125	250	500	1K	2K	4K	8K
5/25	-0.3	9.7	8.9	11.8	22.7	29.1	33.1	34.0
5/50	0.3	7.4	8.0	11.9	22.6	28.8	33.3	34.2
10/25	3.1	10.4	10.6	14.4	25.6	30.0	34.3	34.4
10/50	1.0	7.0	8.0	16.4	24.7	29.4	33.7	33.7



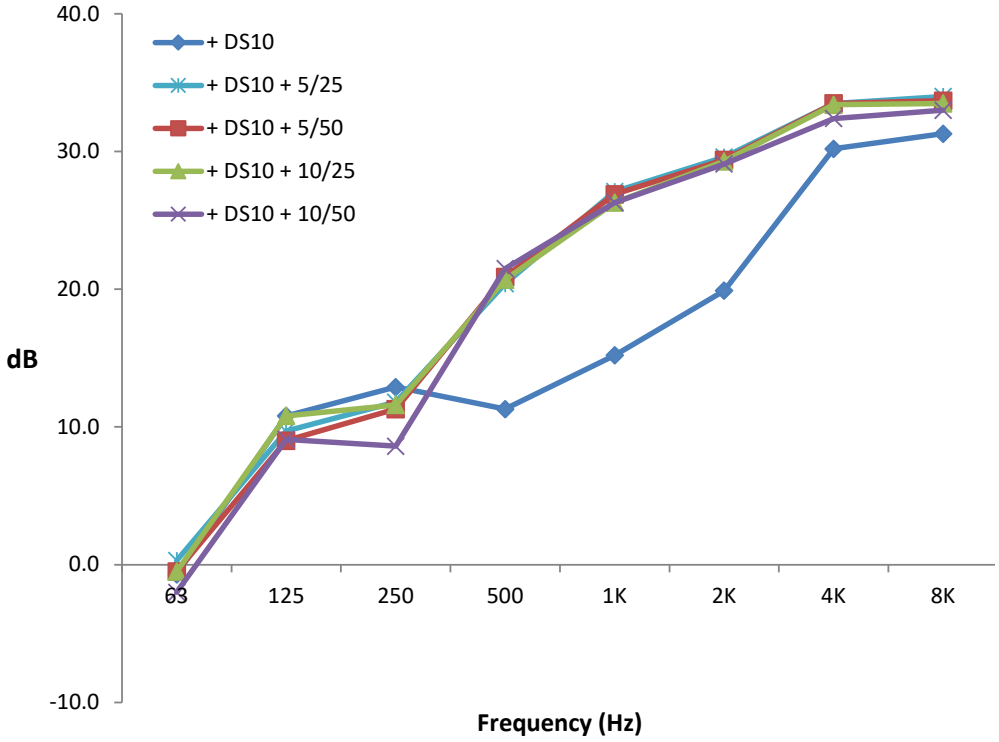
SUPERLAG® Rw on 0.9mm galvanized sheet

Material	Frequency								R_w	SRI
	63	125	250	500	1K	2K	4K	8K		
0.9mm Galvanised Sheet	19.1	16.4	19.0	24.9	30.8	34.7	40.8	43.9	29	26
+DS10	23.0	21.0	15.7	26.6	36.2	43.7	52.6	49.9	30	30
+3/25	23.1	16.1	19.7	32.4	43.1	53.7	58.3	51.7	34	35
+5/25	23.6	17.0	20.1	35.4	44.9	53.2	59.0	51.7	35	36
+5/50	23.2	17.2	24.9	37.8	44.9	54.0	57.3	51.2	38	37
+10/25	24.0	17.7	25.4	38.0	46.1	55.9	60.1	52.0	38	38
+10/50	24.8	17.2	28.7	39.3	47.9	57.0	60.3	51.7	40	40
+DS10+10/50	25.5	24.6	32.4	43.4	53.6	57.9	60.1	51.1	44	43



SUPERLAG® Rw - 315mm diameter Duct Breakout Insertion Loss (non-UKAS accredited)

Material	Frequency							
	63	125	250	500	1K	2K	4K	8K
+DS10	-0.7	10.8	12.9	11.3	15.2	19.9	30.2	31.3
+5/25	0.3	9.7	11.8	20.4	27.1	29.6	33.5	34.0
+5/50	-0.5	9.0	11.3	20.9	26.9	29.4	33.5	33.7
+10/25	-0.5	10.8	11.6	20.7	26.3	29.3	33.4	33.5
+10/50	-2.0	9.1	8.6	21.5	26.3	29.1	32.4	33.0



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