

Technical Data Sheet

PRODUCT

CMS Danskin Acoustics SUPERLAG® Superflex Prime 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. Being of a laminated construction it overcomes the need for a separate isolation layer normally required beneath most forms of acoustic lagging.

FEATURES and BENEFITS

- Easy and quick to apply
- Excellent acoustic performance
- Applied as a single layer treatment
- Excellent fire resistance & temperature stability
- Highly durable
- Low thermal conductivity
- Low toxicity
- Highly flexible suitable for installation on smaller pipes

APPLICATIONS

CMS Danskin Acoustics SUPERLAG® Superflex Prime is a highly efficient acoustic insulation lagging for ductwork, pipes, enclosures and similar applications where a considerable reduction in the passage of noise is required, combined with ease of application.

TECHNICAL INFORMATION

Glass fibre spacer density	16-24 kg/m ³ nominal
Service temperature	-30 to 100°C
Chemical resistance	Oils, water, most solvents

PHYSICAL INFORMATION

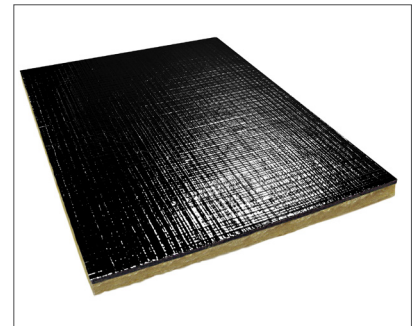
Dimensions

Standard sheet size: 2m x 1.2m. Other sizes are available upon request.

Grades

CMS Danskin Acoustics SUPERLAG® Superflex Prime is available in four grades to suit different performance requirements:

Grade	Barrier Mass (kg/m ²)	Thickness (mm)
SUPERLAG® Superflex Prime 5/25	5	20
SUPERLAG® Superflex Prime 5/50	5	37
SUPERLAG® Superflex Prime 10/25	10	25
SUPERLAG® Superflex Prime 10/50	10	40



ACOUSTIC PERFORMANCE

CMS Danskin Acoustics SUPERLAG® Superflex Prime is a high performance material that has been acoustically tested at certified independent test laboratories.

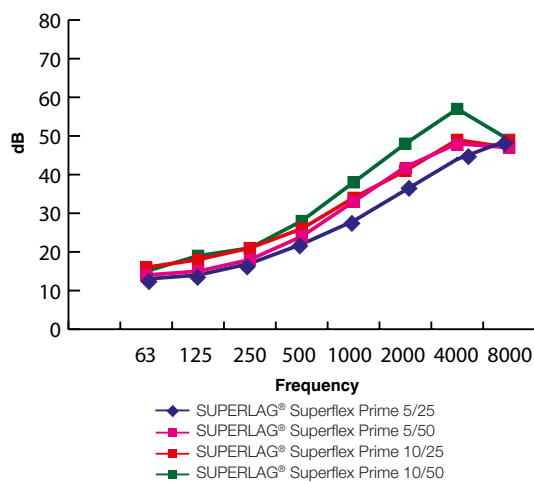
Tested and Rated according to:

BS EN ISO 717-1

BS EN ISO 10140-1

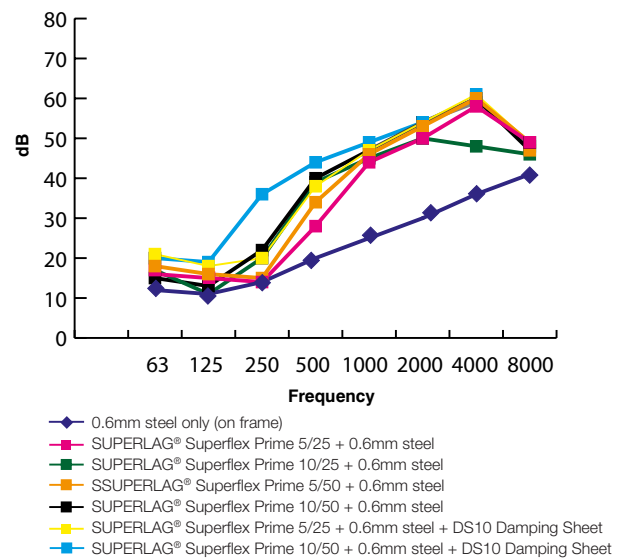
Sound Reduction Index (SUPERLAG® Superflex Prime only, no supporting materials)

Material/Frequency	63	125	250	500	1k	2k	4k	8k
SUPERLAG® Superflex Prime 5/25	13	14	17	22	28	36	44	49
SUPERLAG® Superflex Prime 5/50	14	15	18	24	32	42	48	47
SUPERLAG® Superflex Prime 10/25	16	18	21	25	34	41	49	47
SUPERLAG® Superflex Prime 10/50	15	19	21	28	38	48	57	49



Sound Reduction Index (SUPERLAG® Superflex Prime only, with supporting materials)

Material/Frequency	63	125	250	500	1k	2k	4k	8k
0.6mm steel only (on frame)	12	11	14	20	25	30	36	41
SUPERLAG® Superflex Prime 5/25 + 0.6mm steel	16	15	14	28	44	50	58	49
SUPERLAG® Superflex Prime 10/25 + 0.6mm steel	18	16	15	34	46	53	60	49
SUPERLAG® Superflex Prime 5/50 + 0.6mm steel	15	19	21	28	38	48	57	49
SUPERLAG® Superflex Prime 10/50 + 0.6mm steel	15	13	22	40	47	54	60	47
SUPERLAG® Superflex Prime 5/25 + 0.6mm steel + DS10 Damping Sheet	21	18	20	39	45	50	48	46
SUPERLAG® Superflex Prime 10/50 + 0.6mm steel + DS10 Damping Sheet	20	19	36	44	49	54	59	48



Acoustic duct lagging is a complex subject with the size, shape, thickness and configuration of the ductwork all having a significant effect on the system performance. The data shown above is based on flat panel tests used for SUPERLAG® Superflex Prime products.

Similar tests carried out on ducting will generally produce similar or slightly lower levels of performance.

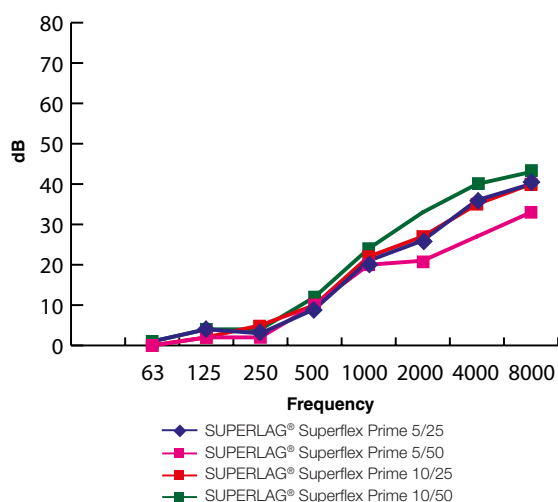
Contact our technical/sales team: 01925 577711

SELECTION GUIDELINES

CMS Danskin Acoustics have recognised the complex problems associated with noise breakout from ductwork and have developed performance data from laboratory test results. This performance data predicts, as closely as possible, the minimum likely improvement achievable by lagging a duct with SUPERLAG® Superflex Prime insulating materials.

The data below is based on 1mm thick ductwork of 3.5m length and 200mm diameter cross section, and indicates the actual improvement of the SUPERLAG® Superflex Prime, with the noise reduction of the original untreated ductwork being removed from this performance data.

Material/Frequency	63	125	250	500	1k	2k	4k	8k
SUPERLAG® Superflex Prime 5/25	1	4	3	9	21	26	36	40
SUPERLAG® Superflex Prime 5/50	0	2	2	10	20	21	27	33
SUPERLAG® Superflex Prime 10/25	0	2	5	10	22	27	35	40
SUPERLAG® Superflex Prime 10/50	1	4	4	12	24	33	40	43



The acoustic performance of CMS Danskin Acoustics SUPERLAG® Superflex Prime can further enhanced by applying on top of a layer of glass fibre slab up to 300mm thick where very high performance levels are required.

To boost the performance and reduce low frequency noise breakout, CMS Danskin Acoustics DS type damping sheet should be applied to the ductwork before installing the SUPERLAG® Superflex Prime.

INSTALLATION GUIDELINES

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

- 1) The size and circumference of the duct.
- 2) The shape of the duct -rectangular or round.
- 3) The ambient temperature and temperature within the duct normal and maximum.
- 4) The location of the duct inside or outside.

Circular ductwork

Round ducts where one sheet of SUPERLAG® Superflex Prime will completely lap the circumference can be insulated without the need for adhesives or extra mechanical fixings. Mating edges should be sealed with Class '0' foil faced adhesive tape to match the finish required. The SUPERLAG® Superflex Prime insulation can be secured to large round ducts using proprietary banding systems, in conjunction with a Class '0' edge tape.

Rectangular ductwork

Rectangular ducts normally require additional support for the SUPERLAG® Superflex Prime in the form of contact adhesive and/ or proprietary insulation fixings, particularly on the underside where the SUPERLAG® Superflex Prime will tend to hang away from the duct surface. It is recommended that large intricate ducts be further supported and reinforced with 25mm wire mesh (i.e. chicken wire) and wire ties.

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

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