Product Specification: Soundlift

Product application: Our vertical sliding doors provide a high performance solution to applications where acoustic separation requirements are critical. Typically found in Entertainment Venues and Theatre applications but also found in many industrial test cell and noise reduction applications.

Key Features:

Opening speed:	Up to 1.5m/s (subject to door size)
Closing speed:	User variable to suit application
Track:	Heavy duty galvanised steel running gear with a single wedge action to allow smooth acceleration, travel and deceleration
Header options:	Custom head system option built to suit the door load and the building structure
Seals:	Unique low friction seal system ensures the highest levels of acoustic attenuation
Fire resistance:	Up to 120 minutes EN 1634-1

Technical data:

Panel thickness:	Generally 100mm to R_w50dB Generally 150mm up to R_w57dB
Standard panel:	Acoustic composite asymmetrically arranged to ensure the highest levels of acoustic attenuation
Panel options:	Standard finish pre-coated plastisol steel sheet, option stainless steel, 304, 316, brushed, polished etc
Leaf capping:	To match door finish
Joint capping:	Isolated powder coated steel flats to ensure a wide and effective joint cover
U value:	100mm = 0.6W/m²K at R_w50dB 150mm = up to 0.39W/m²K at R_w57dB
Acoustic performance:	Maximum R_w57dB single leaf arrangement Maximum R_w67dB tandem arrangement (Soundroll and Soundlift) Maximum >R_w67dB tandem arrangement (Soundlift x 2)
Balancing system:	Fully counterbalanced system with duplex suspension system to ensure safe operation with minimum power requirements

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Control system:

Controller:	Frequency converter with low voltage control circuit
Mains requirement:	To suit application, standard 230V, 50Hz, 16A type B MCB supply
Controls:	Standard 'Open/Stop/Close' on controller fascia set for maintained contact operation
Optional controls:	Semi-automatic and automatic control systems available with the addition of appropriate safety devices

Drive system:

Motor gearbox:	Worm geared motor specifically designed for application on heavy duty sliding door systems
Gearbox features:	Robust low maintenance system with integrated incremental encoder positioning system to ensure that the door is accurately positioned on the acoustic seals on every operation

Safety devices:

Safe edge:	Optional conductive rubber type self-monitoring wireless safe edge (only required if 'dead man' operation is not adopted)
Operation:	In the event of a safety device being tripped the door will revert to 'dead-man' operation
Standards:	In full compliance with EN 12453

Technical design:

Door operation:	Our doors can operate in a quiet and smooth manner due to the detail design that includes the single wedge track system and low friction seal system. Our running wheel bearings are fully sealed with a minimum of six wheels per leaf. This ensures smooth reliable trouble free operation in even the most arduous of environments.

Design flexibility:

Header system:	Due to the mass of our acoustic door leaves we have a selection of 'standard' header designs to suit almost any weight/structure combination
Finish:	Every door we build is custom designed to meet your requirements and as such we offer custom sizes, custom colours and custom finishes

Unique solutions designed
for high performance sound attenuating applications

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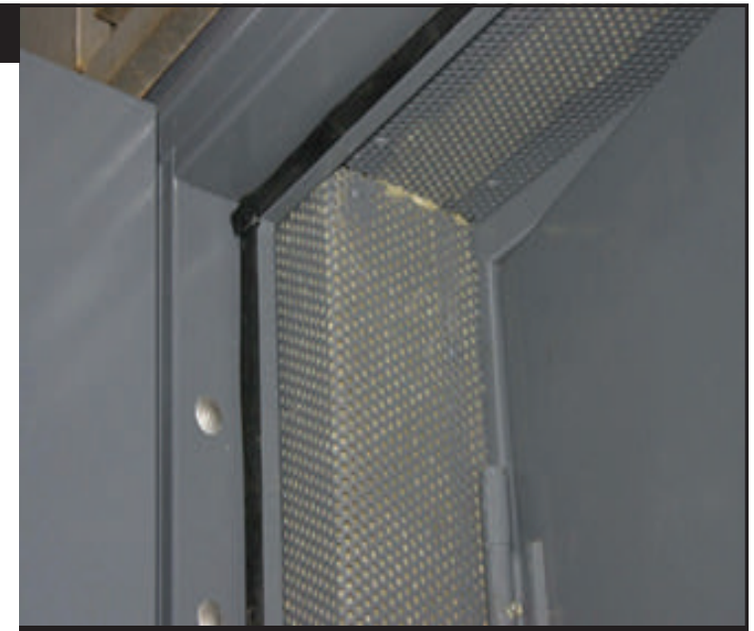
Tandem Arrangements:

Where very high levels of sound reduction are required we offer clients our tandem arrangement whereby two independent doors are fitted either side of the opening. In addition to the individual leaf performances we increase the unit performance by lining the reveal in sound absorbing mineral wool with a capping of perforated steel sheet, see photo. This ensures that we achieve the highest possible levels of sound attenuation possible.



Soundlift Acoustic Door Test Data

Frequency f [Hz]	R 1/3 Octave [dB]	R 1/3 Octave [dB]	R 1/3 Octave [dB]	R Octave [dB]	R 1/3 Octave [dB]	R 1/3 Octave [dB]	R 1/3 Octave [dB]	R 1/3 Octave [dB]
50	-	-	27.5	-	38.8	31.3	39.4	41.4
63	-	-	25.9	25.8	38.8	29.2	35.0	43.0
80	-	-	24.1	-	31.6	25.6	23.9	38.4
100	26.8	27.0	26.8	-	38.5	29.1	31.3	43.7
125	28.1	27.9	27.7	30.5	38.0	30.7	41.6	47.8
160	35.6	37.4	36.8	-	37.8	41.3	45.4	52.9
200	36.3	39.3	43.1	-	40.7	42.8	46.6	53.3
250	35.9	39.6	42.1	43.6	43.4	44.4	50.5	56.3
315	36.1	39.2	43.0	-	42.8	44.1	51.6	57.6
400	37.6	38.8	45.0	-	45.6	45.0	52.9	61.3
500	38.1	39.0	46.2	46.4	47.5	48.3	52.4	66.0
630	37.5	38.7	47.8	-	49.8	52.3	54.1	70.4
800	38.1	40.8	49.7	-	52.8	55.5	55.7	76.1
1000	39.1	42.7	50.7	50.3	56.4	58.8	59.3	80.7
1250	40.4	45.1	52.0	-	60.0	61.4	60.7	82.3
1600	43.6	47.1	52.9	-	62.6	63.9	61.4	84.3
2000	44.7	48.1	54.8	54.8	66.2	66.3	64.9	86.1
2500	46.0	48.4	57.1	-	69.4	69.1	68.4	84.6
3150	46.6	49.1	60.2	-	71.9	70.3	71.1	80.2
4000	47.6	50.8	62.3	61.8	72.3	69.9	71.5	73.8
5000	47.5	50.8	62.8	-	63.0	64.1	63.0	62.4
R_w	41	44	49	50	53	53	57	67
C	-1	-1	-1	-2	-1	-2	-2	-1
Ctr	-3	-4	-6	-7	-5	-8	-8	-7
Thickness mm	90	90	90	90	150	150	150	600
Door Type	**Soundlift 41**	**Soundlift 44**	**Soundlift 49**	**Soundlift 50**	**Soundlift 53LF**	**Soundlift 53**	**Soundlift 57**	**Soundlift 57+ Soundroll 30**

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