



0575

DECIDAMP® SLC

viscoelastic self-levelling vibration damping compound

Decidamp® SLC is a two-component, polyurethane-based, vibration damping compound used in flooring applications. It was developed to meet market requirements to reduce structural noise and vibration in the marine and offshore industries.

Decidamp® SLC is viscoelastic, lightweight and predominantly used as a primary deck layer or a sub-layer to a variety of floor coverings. Inherent self-levelling properties are highly suited to levelling uneven floor surfaces e.g. warped metal plates to provide a seamless flat working surface.

Structural vibration caused by engines, impact noise and footfall is converted to airborne noise, often resulting in excessive noise levels in another part of the structure. By utilising its viscoelastic damping properties, Decidamp® SLC effectively reduces the spread of vibration throughout the structure.

When used between a steel/aluminium deck or any non-combustible cementitious screed, Decidamp® SLC performs like a constrained layer damper that significantly enhances the acoustic properties by isolating and insulating the floor coverings.



applications

- Marine: on decks, as a constrained layer system to reduce vibration noise and structure borne noise
- Underlay for floor coverings
- Reduce impact noise in flooring applications
- Highly suited for levelling uneven surfaces e.g. warped metal plates where a seamless flat working surface is required

SPECIFICATIONS

Colour	Light yellow/beige
Available	Available as a 23.5 kg pack consisting of both Part A and Part B
	Part A 19.6 kg
	Part B 3.9 kg

features

- Tested to international marine fire standards
- Excellent acoustic and vibration damping properties
- Reduces the spread of vibration throughout the structure
- Easy-flow, self-levelling formula
- Excellent adhesion to metal, aluminium and glass composites substrates
- Solvent-free
- Reduces vibrational structural wear/tear
- Suitable for outdoor exposure
- Excellent flame resistance and ignition retardant
- Effective vibration damping performance across a broad temperature and frequency range
- Low-weight, viscoelastic
- High build rate, fast application
- Cures without shrinking or cracking



PRODUCT SPECIFICATIONS

Product	Pack size
Decidamp® SLC	Part A 19.6 kg
Decidamp® SLC	Part B 3.9 kg

APPLICATION PROPERTIES

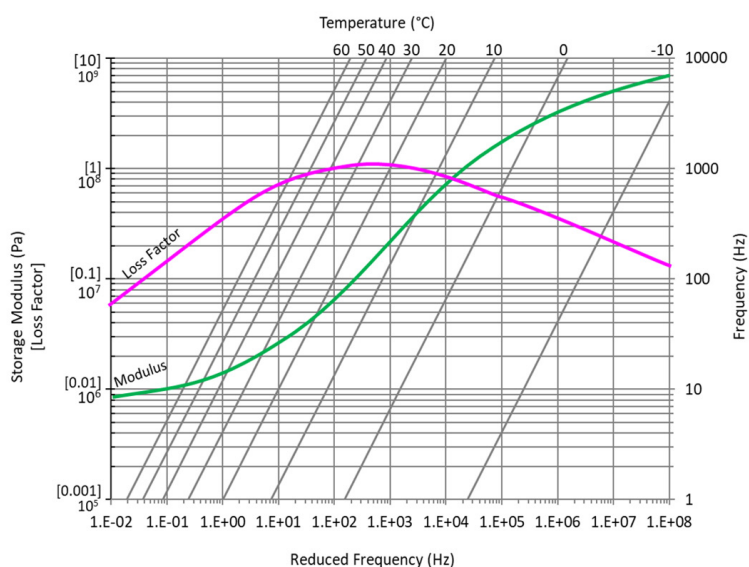
Material	Recommended application temperature range (°C)	Pot life at 25 °C (min)	Consumption (kg/m ² /mm)	Mixed density (g/cm ³)	Mix ratio A:B w/w
Decidamp SLC (Mixed)	10 to 35	20 to 30	1.10	1.10	5:1
Cure time	Once the two components are mixed, setting will start within 30 mins at 25 °C and 35% relative humidity. High temperatures and humidity can accelerate the set time. Full cure is achieved in 24 hours. Treated floor is hardened and open to foot traffic in 10 hours.				
Storage	Store between 10 to 45 °C. Shelf life is 36 months from receiving goods.				

MATERIAL PROPERTIES

Test method	Property	Report	Results
*IMO FTP Annex 1 Part 5	Surface flammability	337240	Complies for primary deck coverings and flooring application. USCG type approval granted.
*IMO FTP Annex 2	Smoke and toxicity		
MED B	EC Type Certificate (Module B) for Marine Equipment Directive	MEDB00007RN	
MED D	EC Type Certificate (Module D) for Marine Equipment Directive	MEDD000028J	
*DNV-GL Type approval & transportation Canada type approval to requirements of TP 14612	Transportation Canada & DNV-GL type approval	F-21137	Complies for offshore standards, SOLAS and recognised by Transport Canada

* When tested in conjunction with cementitious layer such as Weber.floor 4660. (Refer Information page 'Weber.Floor4660' on our website, for more information on cementitious compound for secondary layer)

ACOUSTIC PERFORMANCE



Tested to ISO 6721-5:1996

Report Number: 26924CD

How to read a reduced frequency nomogram:

1. Start by selecting the frequency (Hz) on the right-hand vertical axis.
2. Follow this value horizontally to the left to where the diagonal temperature isotherm intersects.
3. Draw a vertical line through the frequency and isotherm intersection, find the point where this line intersects the modulus and loss factor curves.
4. Draw horizontal lines from these points to the left-hand vertical axis to read the values.

Note: Performance given for Decidamp® SLC only.



SYSTEM ACOUSTIC PERFORMANCE

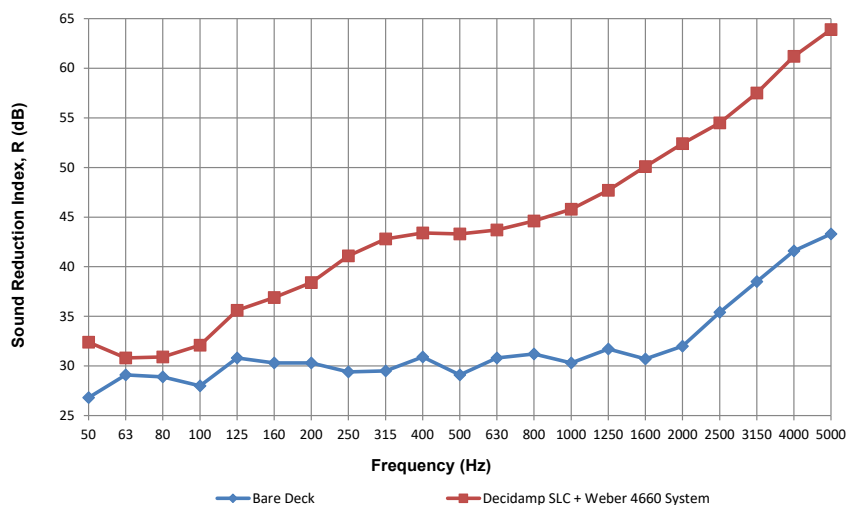
15 mm Weber.Floor 4660N Marine Elastic

1.5 mm

Decidamp® SLC

8 mm Steel Deck

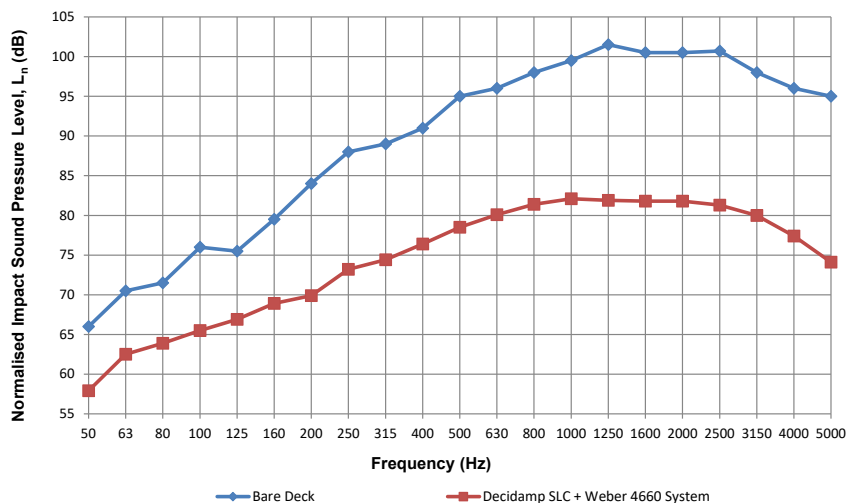
Airborne Sound Insulation



Report Number: 15.4165

Measured in accordance with ISO 10140-2. This data represents the sound insulation of the deck system and is used for evaluating the noise reduction between adjoining spaces.

Impact Sound Insulation



Report Number: 15.4165

Measured in accordance with ISO 10140-3. This data represents the impact sound pressure level in a reverberant room below the deck system and is used for evaluating the reduction of noise from walking or other human activities.

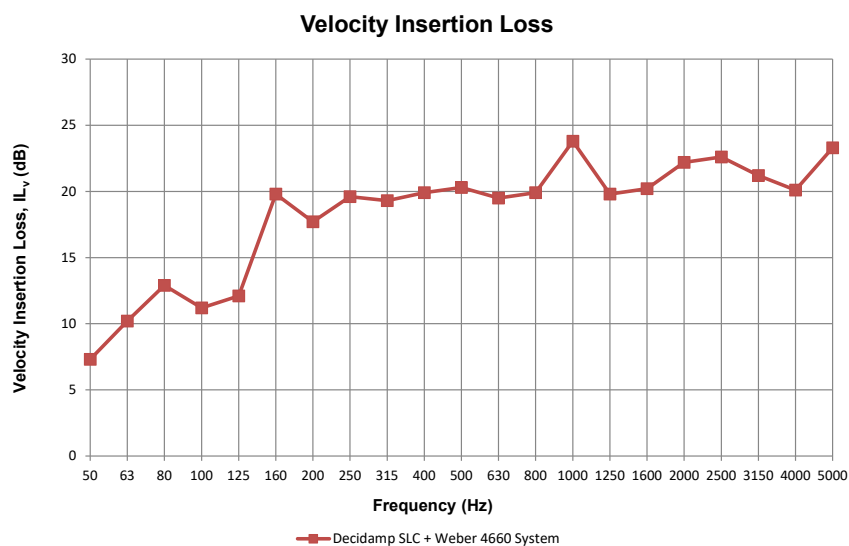
Frequency (Hz)	Decidamp SLC + Weber 4660 System
50	32.4
63	30.8
80	30.9
100	32.1
125	35.6
160	36.9
200	38.4
250	41.1
315	42.8
400	43.4
500	43.3
630	43.7
800	44.6
1000	45.8
1250	47.7
1600	50.1
2000	52.4
2500	54.5
3150	57.5
4000	61.2
5000	63.9
STC	48
Rw	48
C	-1
Ctr	-4

Frequency (Hz)	Decidamp SLC + Weber 4660 System
50	57.9
63	62.5
80	63.9
100	65.5
125	66.9
160	68.9
200	69.9
250	73.2
315	74.4
400	76.4
500	78.5
630	80.1
800	81.4
1000	82.1
1250	81.9
1600	81.8
2000	81.8
2500	81.3
3150	80.0
4000	77.4
5000	74.1
$L_{n,w}$	87
CI	-11
dLm	19



SYSTEM ACOUSTIC PERFORMANCE

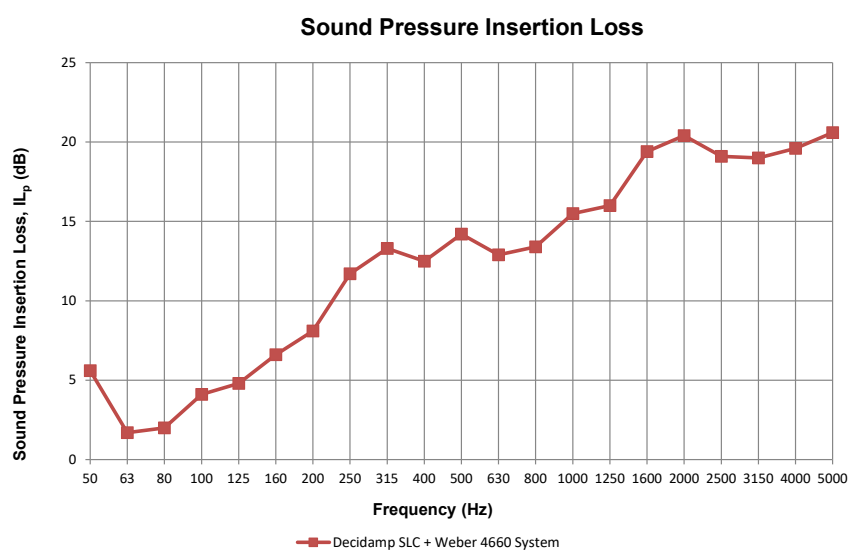
Frequency (Hz)	Decidamp SLC + Weber 4660 System
50	7.3
63	10.2
80	12.9
100	11.2
125	12.1
160	19.8
200	17.7
250	19.6
315	19.3
400	19.9
500	20.3
630	19.5
800	19.9
1000	23.8
1250	19.8
1600	20.2
2000	22.2
2500	22.6
3150	21.2
4000	20.1
5000	23.3



Report Number: 15.4165

This data describes the difference between the velocity level measured on the bare steel deck before the installation of the floor covering, and the velocity level measured after on top of the applied system. The insertion loss values are used for evaluating the reduction of the structure-borne velocity level as a result of the floor covering.

Frequency (Hz)	Decidamp SLC + Weber 4660 System
50	5.6
63	1.7
80	2.0
100	4.1
125	4.8
160	6.6
200	8.1
250	11.7
315	13.3
400	12.5
500	14.2
630	12.9
800	13.4
1000	15.5
1250	16.0
1600	19.4
2000	20.4
2500	19.1
3150	19.0
4000	19.6
5000	20.6



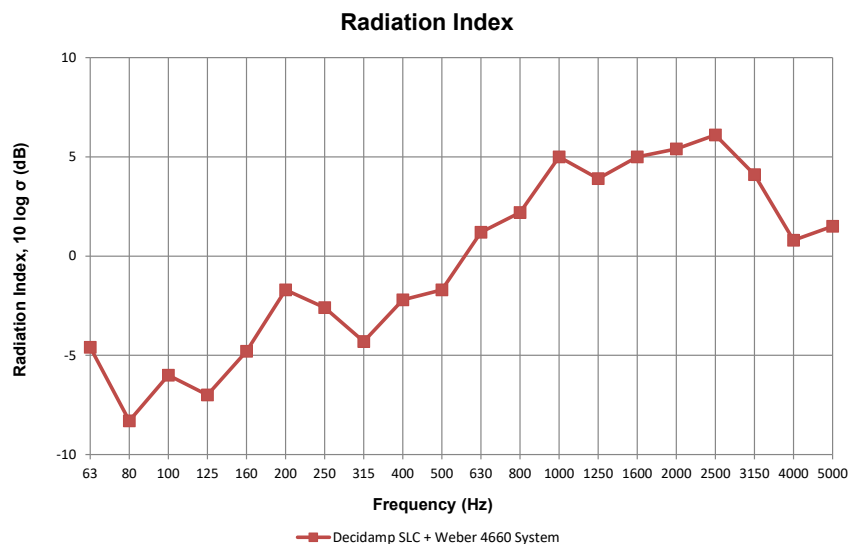
Report Number: 15.4165

This data represents the difference between the sound pressure level measured in the receiving room before installation of the floor covering and the sound pressure level measured after applying the floor covering. The insertion loss values are used for evaluating the reduction of the structure-borne sound pressure level caused by the floor covering.



SYSTEM ACOUSTIC PERFORMANCE

Frequency (Hz)	Decidamp SLC + Weber 4660 System
63	-4.6
80	-8.3
100	-6.0
125	-7.0
160	-4.8
200	-1.7
250	-2.6
315	-4.3
400	-2.2
500	-1.7
630	1.2
800	2.2
1000	5.0
1250	3.9
1600	5.0
2000	5.4
2500	6.1
3150	4.1
4000	0.8
5000	1.5



Report Number: 15,4165

The radiation index is measured according to its equation of definition using an electrodynamic vibration exciter. It describes the ability of a vibrating floor to radiate sound. Thus, a high radiation index, in general terms, means a high noise level and vice versa. In practice, however, the noise level is determined by a combination of the velocity level and the radiation index. This relationship can be used for assessing the total noise level in a space when the velocity level is known.