

DECIDAMP® CLA

constrained layer, vibration damping tile

Decidamp CLA is a constrained layer, visco-elastic damping material designed to reduce structural vibration and sound transmission within metals greater than 2mm in thickness. To achieve high-performance damping, Pyrotek engineering team provides an optimized system - an aluminium face and reinforced viscoelastic core specifically engineered to reduce vibration in heavy gauge structures. The semi-rigid tiles have a unique combination of good mechanical strength and visco-elastic properties that enable them to absorb large amounts of mechanical energy from vibrating substrates. Aluminum metal structures and rigid plastics (ABS and FRP) can easily transmit noise throughout the construction when exposed to vibration.

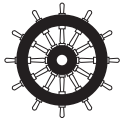
Applying Decidamp CLA to at least 70% of the structure, provides sufficient damping, resulting in reduced vibration, lower radiated noise and higher transmission loss, making CLA an effective treatment for low frequency noise.

Decidamp CLA is a light weight damping tile, with an easy peel-and-stick backing, the application is faster than other insulation installation methods. The flexible and conforming viscoelastic layer ensures good contact and bond with the installation surface. Its high damping performance allows for a thinner constraining plate to be used in the composite – resulting in lighter metal plates than competing solutions. Further to saving weight, thinner plates increase flexibility and aid in installation on curved surfaces.

SPECIFICATIONS

Colour	Silver
Available	Sheet size: 295 x 295 mm (11.6 x 11.6 in) 285 x 190 mm (11.22 x 7.48 in)
	Custom sizes available with MOQ
	Aluminium thickness of 1.5 and 2 mm available upon request depending on MOQ

Available with steel counterplate - please refer to Decidamp CLS



0575



applications

- Aluminium & rigid plastics (ABS, Fibre reinforced plastic, Carbon composite, etc.) surfaces
- Marine vessels applications such as bulkheads, hull construction, tank tops, engine bed girders and the structure above props
- Heavy machinery panelling
- Generators, compressor covers and machine housing guards
- Metal air-conditioning ducts and compressor housings
- Laundry and garbage chutes, hoppers, lids and bins

features

- Free from lead and bitumen
- Full Decidamp CLA range complies to IMO FTP 2010-low spread of flame
- Lightweight and easy to handle
- Easy to install, high-tack self-adhesive backing, simply peel and apply pressure to position
- Easily conforms to irregular surfaces without the use of heat guns
- Remains flexible, does not become brittle
- Resistant to weather and UV light
- Great low frequency and broad frequency damping performance



PRODUCT SPECIFICATIONS

Product	Thickness (mm)	Weight (g)	Sheet sizes (mm x mm)	Consumption per 1m ²	Application Temperature	Operating Temperature
Decidamp CLA 50	6.9	255	285 x 190 (11.22 x 7.48 in)	12.5 tiles will cover approx 1m ² (3.2 kg / m ²)	10°C to 45°C (50°F to 113°F)	-10 to 100°C (14 to 212°F) Continuous
Decidamp CLA 100	7.4	300		12.5 tiles will cover approx 1m ² (3.7 kg / m ²)		-40 to 150°C (-40 to 302°F) Intermittent

All values nominal. Tolerances: Length / Width: -0/+5 mm (0.2 in); Thickness: +/- 1 mm (0.04 in); Weight: -0 /+10%

PRODUCT CODE NOMENCLATURE

DECIDAMP CLA 50

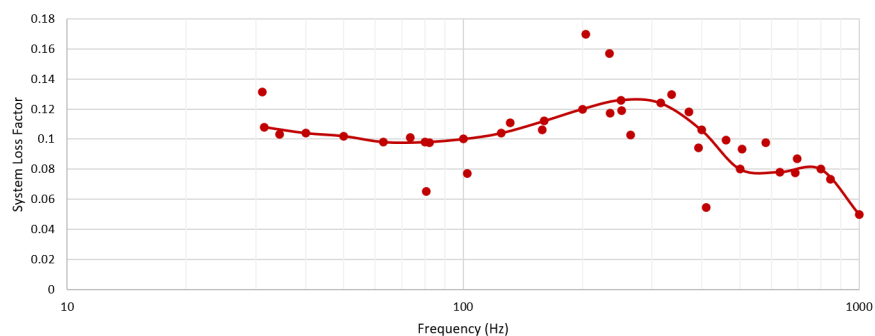
Constrained Layer Aluminium
Grade, Aluminium thickness
Grades - 50 (0.5mm), 100 (1mm)

MATERIAL PROPERTIES

Test Method	Property	Report No.	Results
IMO FTP Annex 1 Part 5	Surface flammability	546711, 548034, 549626	Complies for bulkhead, walls, ceiling linings and floors
IMO FTP Annex 2	Smoke and Toxicity		
MED B	EC Type Certificate (Module B) for Marine Equipment Directive	MEDB00009A0	
MED D	EC Type Certificate (Module D) for Marine Equipment Directive	MEDD000028J	
Intersona Loss Factor Measurement Method	System Loss Factor	7582-01	Decidamp CLA 50 on 5mm Aluminium substrate measured average loss factor 0.10 (50 Hz – 1kHz) Decidamp CLA 50 on 8mm Aluminium substrate measured average loss factor 0.07 (50 Hz – 1kHz)
Van Cappellen Consultancy Loss Factor Measurement Method	System Loss Factor	261003	Decidamp CLA 50 on 5mm Aluminium substrate achieves 9.92% average damping loss

ACOUSTIC PERFORMANCE

Decidamp CLA 50 on 5mm Aluminium Panel



Tested to VCC Loss Factor Measurement Method
Test Report 261003

For further information
and contact details,
please visit our website
pyroteknc.com

Caveats: Specifications are subject to change without notice. The data in this document is typical of average values based on tests by independent laboratories or by the manufacturer and are indicative only. Materials must be tested under intended service conditions to determine their suitability for purpose. The conclusions drawn from acoustic test results are as interpreted by qualified independent testing authorities. Nothing here releases the purchaser/user from responsibility to determine the suitability of the product for their project needs. Always seek the opinion of your acoustic, mechanical and fire engineer on data presented by the manufacturer. Due to the wide variety of individual projects, Pyrotek is not responsible for differing outcomes from using their products. Pyrotek disclaims any liability for damages or consequential loss as a result of reliance solely on the information presented. No warranty is made that the use of this information or of the products, processes or equipment to which this Information Page refers will not infringe any third party's patents or rights.
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