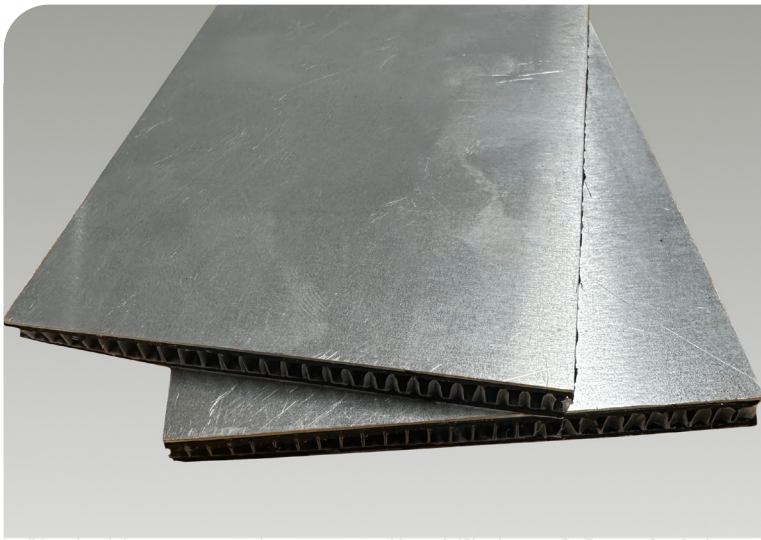
0575

# 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.

## 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

## SPECIFICATIONS

| | |
|---|---|
| Colour | Silver |
| Available | Sheet size:<br>295 x 295 mm (11.6 x 11.6 in)<br>285 x 190 mm (11.22 x 7.48 in)<br><br>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*

## PRODUCT SPECIFICATIONS

| Product | Thickness (mm) | Weight (g) | Sheet sizes (mm x mm) | Consumption per 1m² | 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 1m² (3.2 kg / m²) | 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 1m² (3.7 kg / m²) | | -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

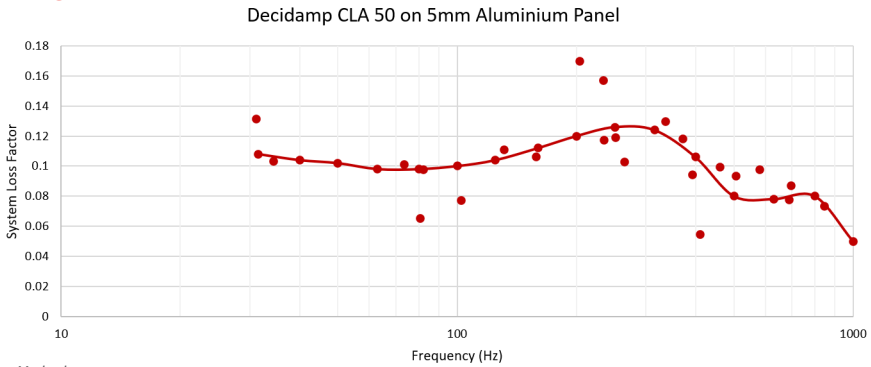
DECIDAMP **CLA** **50**

- CLA → Constrained Layer Aluminium
- 50 → 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 | 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




*Tested to VCC Loss Factor Measurement Method*
*Test Report 261003*

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