

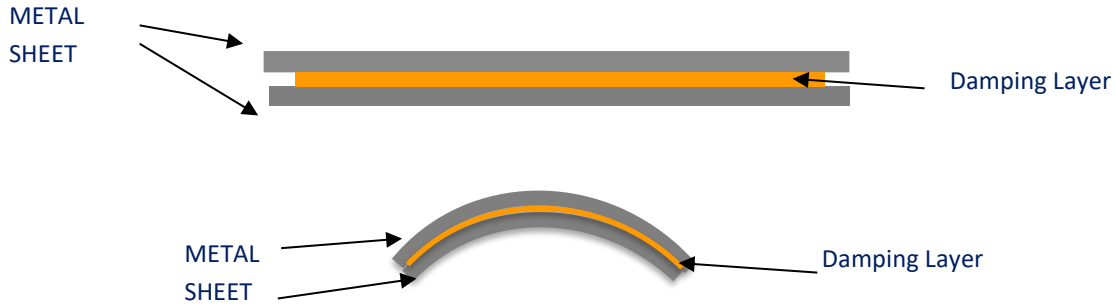
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Yayın Tarihi : 1.02.2023  
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## NDS® COMPOSITE PANEL (STEEL & ALUMINUM)

### Description

NDS® Composite Panel is a fully damped steel composite panel consists of two outer layers of steel or aluminum laminated together using a layer of a viscoelastic inner layer. Viscoelastic interlayer functions to damp disturbing structure-borne noise.

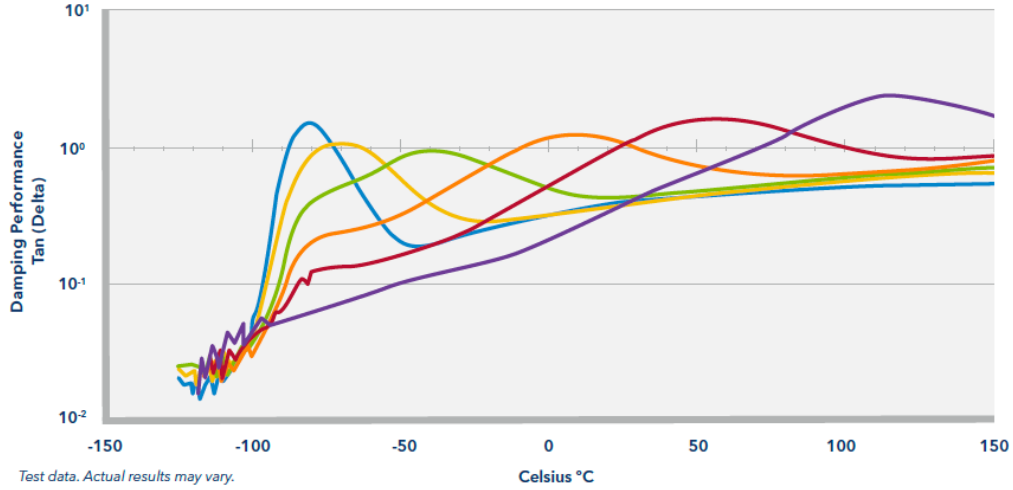
NDS® Composite Panel provides a significant vibration damping capacity in comparison to a normal metal sheet. The high loss factors make it very well suited for e.g. ceilings, walls and even floor systems. The system is based on the principal of sandwich anti-drumming with a constrained layer. When the NDS® Composite Panel starts to vibrate, the viscoelastic layer transforms vibration into thermal energy.



### Acoustic Properties

While standard viscoelastic materials such as acrylic and rubber based adhesives shows damping performance capabilities at very narrow temperature ranges, viscoelastic layer used by NDS® demonstrates excellent performance at low, room and high temperatures intervals. Typical acoustic performance depicted below figure.

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## Technical Data

### NDS® Properties

Material	Aluminum EN AW 5754 H111- EN AW 5083 H111 Steel Stainless steels (304 and 316), DKP steel, galvanized steel
Dimensions	1000 x 2000 mm Other dimensions are available on request
Thickness	1.25, 1.65, 2,05 mm (steel) 2.05, 4,05 mm (aluminum) (thickness of viscoelastic inner layer : 50 µm - 100 µm) Custom thicknesses are available on request
Coating/Color	Plain, Powder coating in RAL colors is available on request
Density	7400 kg/m <sup>3</sup> (Steel) 2600 kg/m <sup>3</sup> (Aluminum)

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## Applications

- ✚ Engine rooms
- ✚ Enclosures for machinery, generator etc.
- ✚ Air ducts
- ✚ Automotive oil sumps, panels
- ✚ Acoustic wall panels
- ✚ Acoustic hoods and chutes
- ✚ HVAC equipment

## Features

- ✚ Provides damping structure-borne sound at minimum thickness
- ✚ Replaces existing sheet metal
- ✚ Saves weight and thickness for damping noise
- ✚ Able to be power coated
- ✚ Acoustic performance at broad temperature range (-50 to 150 °C)