**Constrained Layer Damping material**

**CLD14 / CLD21**

DAMPING SHEET

**Description**

CLD 14 consists of a bitumen mat with self adhesive and paper release on both sides. Comes in 2 thicknesses; 1.4 mm and 2.1 mm. CLD sheets are primarily used for attenuation of radiation of structureborne noise in mechanical structures. Can be used in various applications with plywood, steel or aluminium base plates. Usually recommended for stiff structural applications, where unconstrained damping is unsufficient. Energy is dissipated as a result of shear deformation in the damping layer.

Material should have room temperature when cutting and during installation.

Light weight applications: Ventilation ducts, cabinets, noise enclosures, cabins.

Heavy duty applications: Bulkhead isolation, heavy constructions, thick steel panels. Wind turbine generators, Marine & Offshore

**Product specification**

**Thickness:**
- 1.4: 1.4 ± 0.2 mm
- 2.1: 2.1 ± 0.3 mm

**Sheet dimension:**
1020 mm x 1020 mm (standard)

**Custom dimensions and cut on request**

**Surface weight:**
- 1.4: 1.3 kg/m² (+0.25 / -0.13 kg/m²)
- 2.1: 2.0 kg/m² (± 0.2 kg/m²)

**Adhesion:**
Initial adhesive force: Min. 6 N/50 mm according to TM 206
Ultimate strenght: Min. 70 N/50 mm according to TM 214

**Fire resistance:**
< 75 mm/ min according to FMVSS 302

**Temperature range:**
-30 ° C - + 90 ° C

**Storage**
Max. 6 months in tempererature 0 ° C - + 30 ° C

**Tolerences**
- Raw format - 0
- Cutting ± 5 mm
- Punch ± 2 mm

Examples: Thick baseplate of 25 mm steel in a heavy duty generator application. Lossfactor are measured in the frequency range below 100 Hz

<table>
<thead>
<tr>
<th>Base - steel sheet in 25 mm</th>
<th>Measured lossfactor η 0.5-1.0 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base + 1.4 mm CLD + 6 mm steel sheet</td>
<td>Measured lossfactor η 5-10 %</td>
</tr>
<tr>
<td>Base + 10 mm alu honeycomb spacer + 1.4 mm CLD + 6 mm steel sheet</td>
<td>Measured lossfactor η 5-12 %</td>
</tr>
<tr>
<td>Base + 1mm steel sheet + CLD14 + 6 mm steel sheet</td>
<td>Measured lossfactor η 8-10 %</td>
</tr>
</tbody>
</table>

We are continuously developing and improving our products and therefore construction and specifications on our datasheets be changed without prior notice.
General behavior of Constrained layer damping

![Diagram of Constrained Layer Damping](image)

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