Subdue® M is a multilayered damped noise barrier panel constructed from two outer layers of lightweight marine grade hardwood, compliant to BS 1088, with the inner core comprising a damped viscoelastic layer. The inner core is thin, dense and made from a specially developed polymer with superior damping properties to improve transmission loss and reduce structure borne noise. These properties make Subdue M a thinner and higher performing composite panel over Subdue L. The product is suited as a lightweight wall, ceiling or floor construction in commercial, rail, and marine constructions.

The 'M' category of 'Subdue' panels includes an inner core with a density of up to 1500 kg/m³. The core can be offered in weights ranging from 2 – 6 kg/m². It is available in nominal thicknesses of 10, 14 and 20 mm. Additional thicknesses between 10 and 20 mm can be produced depending on customer specification.

Coincidence dip is a common phenomenon in lightweight panels, that adversely impacts the sound transmission loss performance in materials such as timber, plywood, sheet metal, low density rigid foams and hollow core walls. Subdue’s unique multilayered composition with its inner core layer, reduces the impact of the coincidence dip, thereby maintaining the performance of the panel. Subdue M works by reflecting, absorbing and damping the vibration and transmission of sound through walls and floors, reducing the noise generated from sources such as mechanical equipment, engines and electronic audio devices.

Pyrotek endorses forest sustainability and the preservation of natural environment. We procure highest quality materials from suppliers who hold FSC Certification (Forest Stewardship Council) and PEFC (Programme for the Endorsement of Forestry Certification) amongst other certification programmes.

Subdue lightweight marine grade hardwood is tested to AS/NZS 2098.11 and classifies as ‘E-0’ for low formaldehyde emission.

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Core Material</th>
<th>Wavebar*</th>
</tr>
</thead>
</table>
| Available     | Standard sheet size:  
2440 mm x 1220 mm untrimmed*  
2400 mm x 1200 mm trimmed  
Okoume plywood (standard), other species available on request depending on MOQ |

*Untrimmed means some layers may overhang the usable width.

**applications**

- Used to construct floor, partition walls and lining panels in commercial or rail industries
- Particularly suited for medium privacy areas such as VIP rooms and master state rooms
- Extensively specified for interior marine construction e.g. bulkheads, cabin partitions, floating floors
- Flooring systems in the rail industry and motor coach industry to reduce road and track noise
- Used in the audio industry to construct high quality speaker enclosures
- Fabrication of acoustic doors
- Used in conjunction with an isolation mount to create floating wall, floor and ceiling systems

**features**

- Available in a range of lightweight marine grade plywood, tested to BS 1088
- Tested for low formaldehyde emission
- Simple to saw-cut, fabricate and install using conventional woodworking tools
- Tested and proven to have superior damping properties over standard plywood and similar panels
- Thin and lightweight panels whilst still possessing high noise reduction properties
- Bonded using water resistant glues, Weather and Boil Proof (WBP) tested, according to BS 1088
- Available in preformed cut panels and varying constructions (offering weight savings) to suit differing designs
- Subdue M: product category with core layer density of up to 1500 kg/m³
PRODUCT SPECIFICATIONS

<table>
<thead>
<tr>
<th>Grade</th>
<th>Nominal Total Thickness (mm)</th>
<th>Panel Construction (mm)</th>
<th>Nominal Weight (kg/m²)</th>
<th>Flexural strength (MPa) ASTM D790 (Report no. 23611PH)</th>
<th>Rw / STC*</th>
<th>Decay rate (dB/s)</th>
<th>Sheet size (mm x mm)</th>
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</thead>
<tbody>
<tr>
<td>Subdue M10/1500</td>
<td>10</td>
<td>4 2 4</td>
<td>8</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2440 x 1220 (untrimmed)**</td>
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<td>10</td>
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<td>2400 x 1200 (Trimmed)</td>
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<td>34/34</td>
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Tolerances: Directions ±5%; Weight: Nominal based on Okoume plywood; *Refer to Acoustic Performance below; **Untrimmed means some layers may overhang the usable width. Other grades and thicknesses available. Please contact your local Pyrotek representative for more information.

ACOUSTIC PERFORMANCE

<table>
<thead>
<tr>
<th>Frequency (Hz)</th>
<th>9 mm Plywood</th>
<th>Subdue M14/1500</th>
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<td>125</td>
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<td>22.0</td>
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<td>200</td>
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Report Number: 222a
Tested with Okoume Plywood.

PRODUCT CODE NOMENCLATURE

Subdue M 20 / 1500

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