

# DATA SHEET – Sound dumping multilayer panels

A sound damping panel is composed of two sheets of deciduous (birch and alder wood) water-resistant (phenol-formaldehyde resin) plywood, between which is inserted sound and vibration damping material (damping lining or rubber-cork). In case of improved surface, one of plywood sheets is additionally covered with a phenol film protecting against moist and mechanical resistance, abrasion resistance of the surface.

## Rodzaj sklejenia

- sound damping panel are produced based on phenol-formaldehyde resin; for use in exterior conditions (according to EN 636) meeting the requirements of class 3 bonded to DIN EN 314-2

## Classification of sound damping panel according to the surface:

- with an unfinished, raw surface
- with a surface protected with a phenolic film, on one-side
- with a surface protected with a phenolic film, on both sides\*

\* with such surface protection, the panels meet the requirements for materials used in railway. R10 requirements according to PN-EN 45545-2: 2013 for the hazard level HL1, HL2, HL3.

## The thickness and tolerances

Sound damping panel are produced in the thickness range from 12 to 20 mm. Thickness tolerances are defined in the standard EN 315.

## Some of physical and mechanical parameters

Nominal thickness	The number of layers	Thickness tolerance [mm]		Density [kg/m <sup>3</sup> ]	Strength parameters			
		min.	max.		Static bending [MPa]		Modulus of elasticity [MPa]	
						⊥		⊥
12	4+WG+4	11,2	12,6	1030	50	40	5000	3000
15	5+WG+5	14,1	15,7	950	50	40	5500	5000
18	7+WG+7	17,1	18,7	900	50	40	5500	5000
20	7+WG+7	19,0	20,8	850	60	50	6000	5000

\*WG- damping layer

## Humidity

The humidity of sound damping panel is in range of 10±5% (according to PN-EN 322).

## Standard formats

2440 x 1250mm or as agreed with the customer.

Tolerances length and sheet width: ± 3.5 mm (according to PN-EN 315).

Tolerances of squareness edge: ± 1.0 mm / m of side length (according to EN 315).

## Processing options:

Cutting into smaller formats; simple and profile processing of edges, drilling holes, milling grooves, grooves, rebates; machining on CNC machining centers.

## Application

A plate with increased sound and vibration absorption capacity, intended for installation in motor vehicles and rolling stock.

