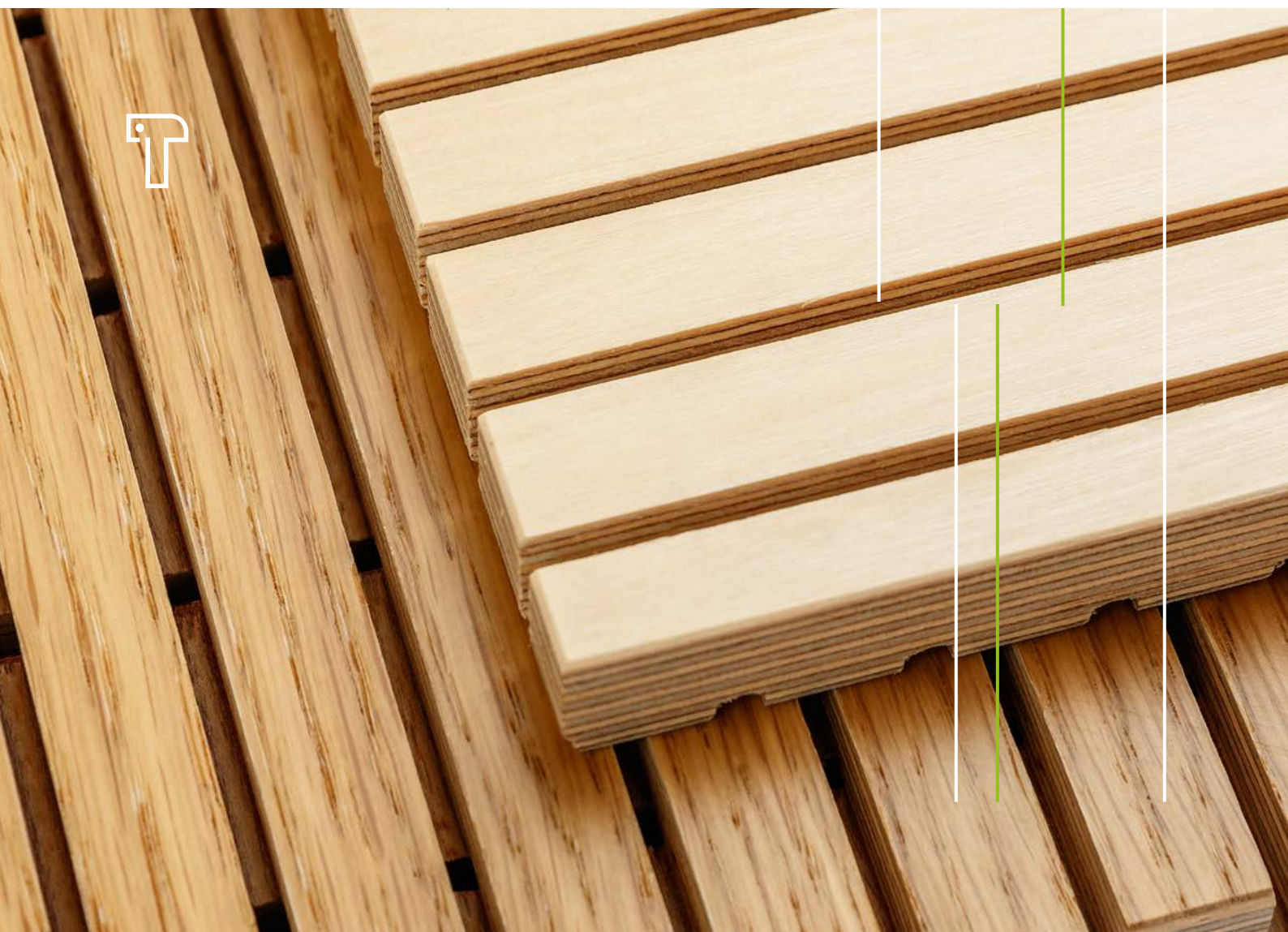


Acoustic Panels

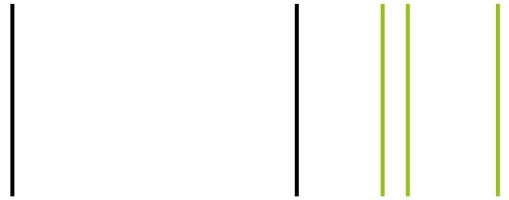
Grooved

*Riga Wood birch throughout plywood with **grooves**, designed to provide improved insulation and acoustic performance.*



Acoustic Panels

Grooved



Application

Riga Wood Acoustic panels have both functional and decorative features, making them the perfect choice for indoor applications. Distance and width between grooves allow the panels to absorb noise and create a healthy, pleasant and more peaceful environment.

- Decorative wall & Ceiling panels
- Separating wall elements
- Joinery, furniture & Shopfittings

Major advantages

- Absorbs noise and echo
- Decorative appearance with a wide range of high-quality surfaces
- Aesthetic and visually attractive
- Ready to use, easily workable
- Low volatile organic compounds (VOC), including formaldehyde emissions
- Sustainable product

Base plywood

Riga Wood birch throughout plywood Riga Decor, Riga Lacquer, Riga Mel and Riga Ply are recommended as base panels.

Material	Maximum size (mm)	Thickness (mm)
Riga Decor	3050x1250	15; 18
Riga Lacquer	2500x1250	15; 18
Riga Mel	3050x1250	15; 18
Riga Ply	2500x1250	15; 18

* Information about the characteristics of the materials can be found in the product data sheets.

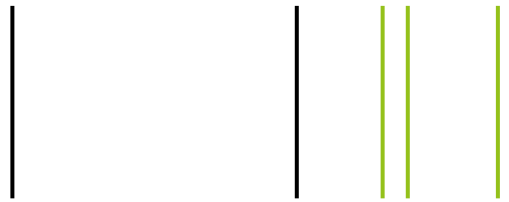
Machining and treatment

Panels are mechanically processed by grooving with a distance of 16 mm and width 4 mm on the decorative face of the panel, and with a distance of 16, 32 or 64 mm on the reverse face of the panel.

Acoustic panels can be further machined and treated according to customer's requirements: T&G, cut-to-size, CNC, milled, lacquered. Nonwoven fabric can be glued on the reverse face of the panel.

Acoustic Panels

Grooved



Gluing classes

Riga Wood birch plywood is glued with weather and boil-proof phenol formaldehyde or lignin phenol formaldehyde resin adhesive according to EN 314 / Class 3 Exterior. Bonding with moisture resistant low emission melamine-urea-formaldehyde resin according to EN 314 / Class 1 and BS 1203 / H1 is possible.

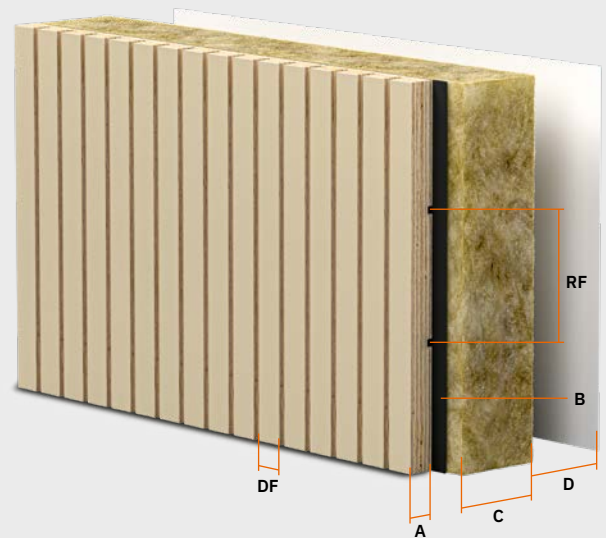
Formaldehyde emission

Riga Wood birch plywood formaldehyde emission level is significantly below EN 13986 Class E1 and complies with EPA TSCA Title VI and CARB Phase 2. Riga Ply is also compliant with the requirements of the Finnish Emission Classification of Building Materials (M1), French VOC Emissions Labelling Class A+ and Japanese 4-Star Regulation.

Testing report

The measurements of the plywood panel sound absorption coefficient are made in cooperation with acoustics laboratory "R&D akustika" according to EN ISO 11654. The following test results are shown for uncoated panels.

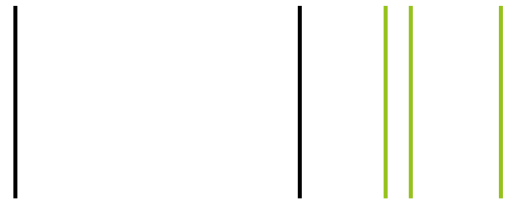
Acoustic panel construction



A	Plywood	Thickness: 15 mm
B	Nonwoven fabric	Density: 60 g/m ²
C	Mineral wool	Density: 80 kg/m ²
D	Air Gap	–
DF	Decorative face groove	Width: 4 mm Depth: 12 mm
RF	Reverse face groove	Width: 4 mm Depth: 3 mm

Acoustic Panels

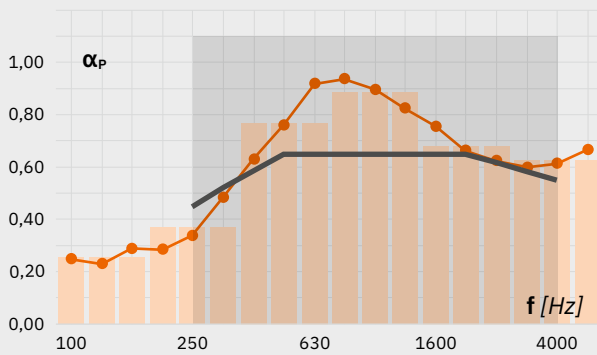
Grooved



Panel M 4-16/4-16

Plywood	Grooving distance		Mineral wool	Air Gap
A	DF	RF	C	D
15	16	16	25	0

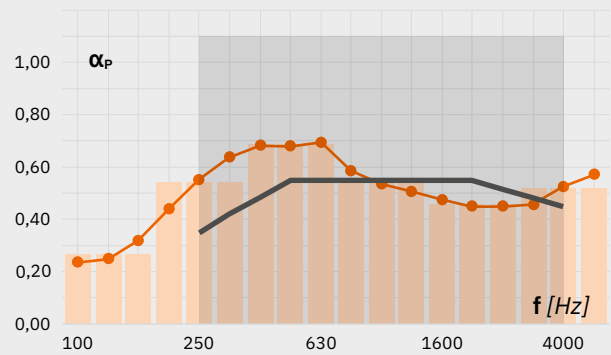
Absorption coefficient α_w : 0.65
Absorption class: C



Panel M 4-16/4-64

Plywood	Grooving distance		Mineral wool	Air Gap
A	DF	RF	C	D
15	16	64	25	0

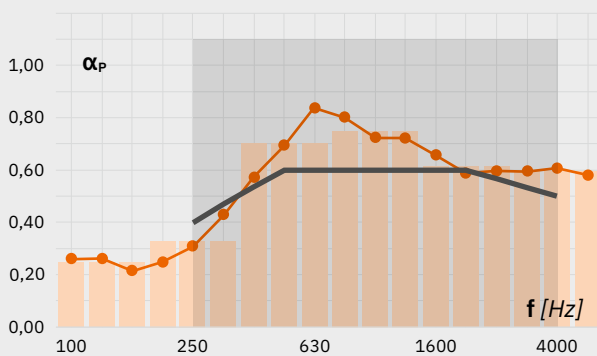
Absorption coefficient α_w : 0.55
Absorption class: D



Panel M 4-16/4-32

Plywood	Grooving distance		Mineral wool	Air Gap
A	DF	RF	C	D
15	16	32	25	0

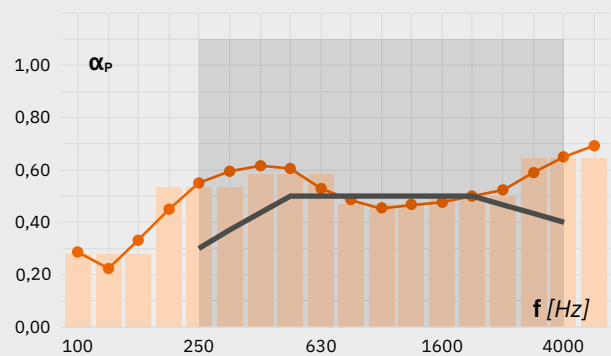
Absorption coefficient α_w : 0.60
Absorption class: C



Panel M 4-16/4-192

Plywood	Grooving distance		Mineral wool	Air Gap
A	DF	RF	C	D
15	16	192	25	0

Absorption coefficient α_w : 0.50
Absorption class: D



Predicted sound absorption coefficient octave bands

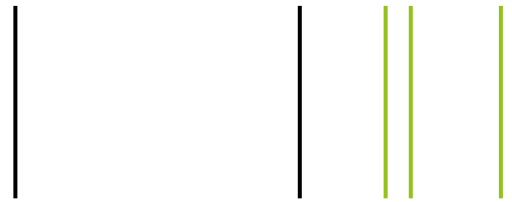
Predicted sound absorption coefficient in 1/3 octave bands

Reference curve by EN ISO 11654

Reference curve by EN ISO 11654

Acoustic Panels

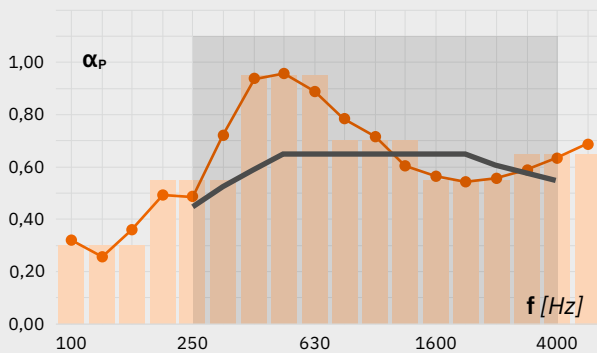
Grooved



Panel M 4-16/4-16

Plywood	Grooving distance		Mineral wool	Air Gap
A	DF	RF	C	D
15	16	16	25	35

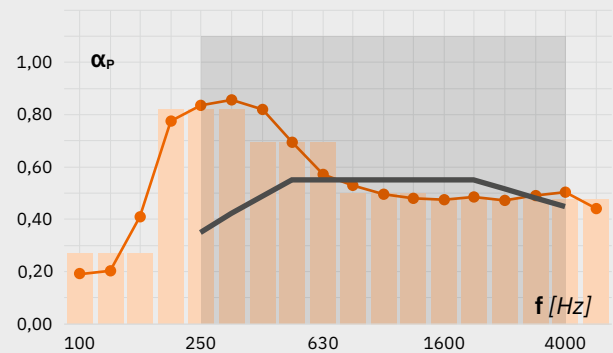
Absorption coefficient α_w : 0.65
Absorption class: C



Panel M 4-16/4-64

Plywood	Grooving distance		Mineral wool	Air Gap
A	DF	RF	C	D
15	16	64	25	35

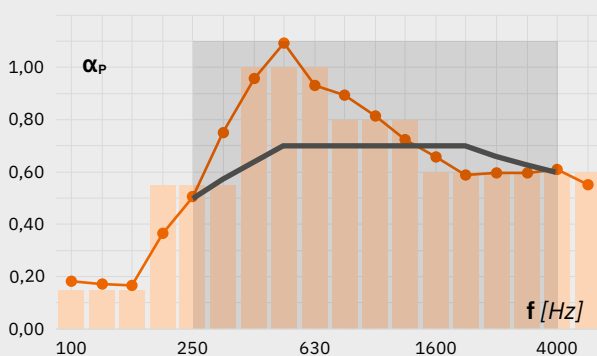
Absorption coefficient α_w : 0.55
Absorption class: D



Panel M 4-16/4-32

Plywood	Grooving distance		Mineral wool	Air Gap
A	DF	RF	C	D
15	16	32	25	35

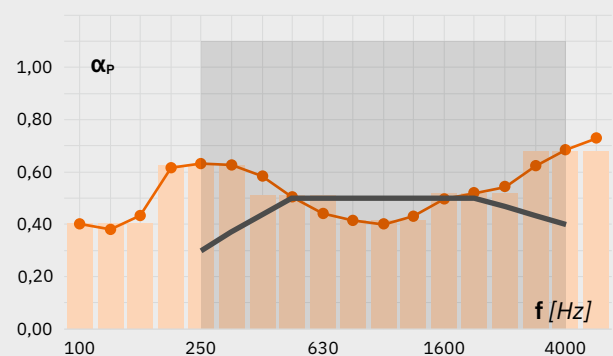
Absorption coefficient α_w : 0.70
Absorption class: C



Panel M 4-16/4-192

Plywood	Grooving distance		Mineral wool	Air Gap
A	DF	RF	C	D
15	16	192	25	35

Absorption coefficient α_w : 0.50
Absorption class: D



Predicted sound absorption coefficient octave bands

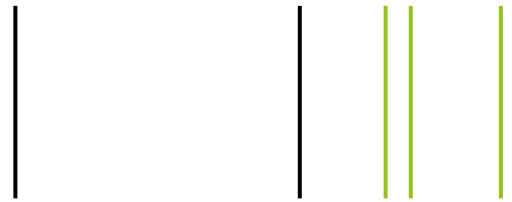
Predicted sound absorption coefficient in 1/3 octave bands

Reference curve by EN ISO 11654

Reference curve by EN ISO 11654

Acoustic Panels

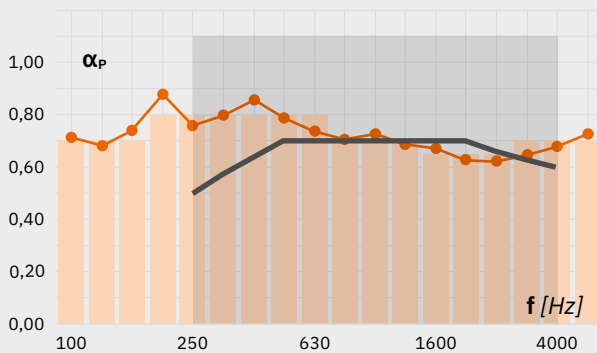
Grooved



Panel M 4-16/4-16

Plywood A	Grooving distance DF RF		Mineral wool C	Air Gap D
15	16	16	25	175

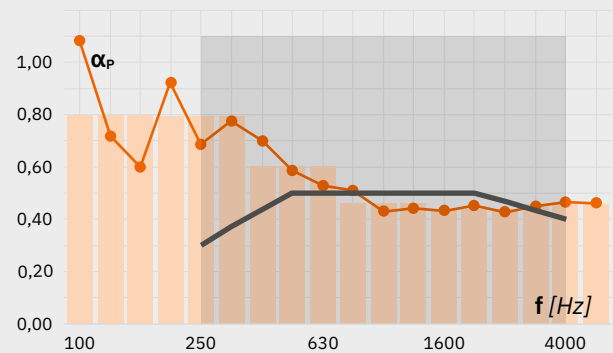
Absorption coefficient α_w : 0.70
Absorption class: C



Panel M 4-16/4-64

Plywood A	Grooving distance DF RF		Mineral wool C	Air Gap D
15	16	64	25	175

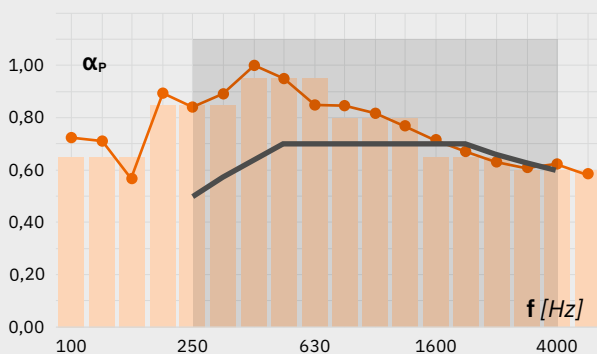
Absorption coefficient α_w : 0.50
Absorption class: D



Panel M 4-16/4-32

Plywood A	Grooving distance DF RF		Mineral wool C	Air Gap D
15	16	32	25	175

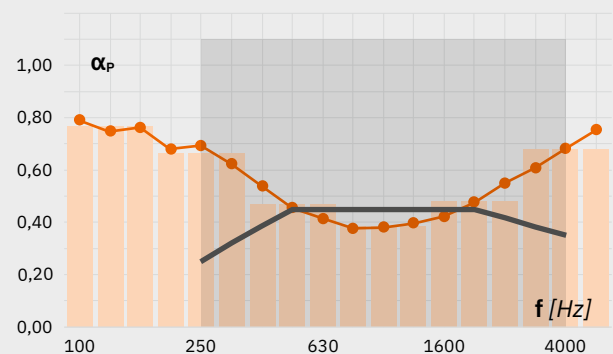
Absorption coefficient α_w : 0.70
Absorption class: C



Panel M 4-16/4-192

Plywood A	Grooving distance DF RF		Mineral wool C	Air Gap D
15	16	192	25	175

Absorption coefficient α_w : 0.45
Absorption class: D



Predicted sound absorption coefficient octave bands

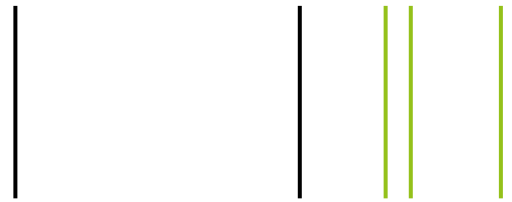
Predicted sound absorption coefficient in 1/3 octave bands

Reference curve by EN ISO 11654

Reference curve by EN ISO 11654

Acoustic Panels

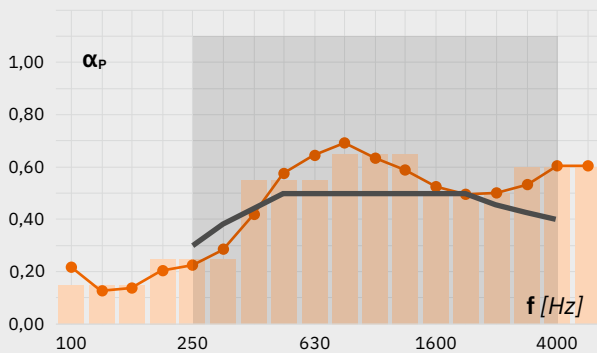
Grooved



Panel M 4-16/4-16

Plywood	Grooving distance		Mineral wool	Air Gap
A	DF	RF	C	D
15	16	16	0	60

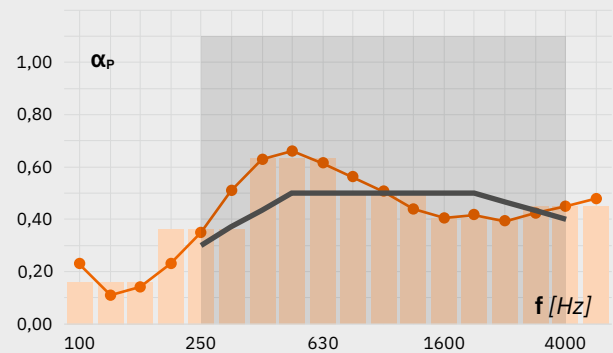
Absorption coefficient α_w : 0.50
Absorption class: D



Panel M 4-16/4-64

Plywood	Grooving distance		Mineral wool	Air Gap
A	DF	RF	C	D
15	16	64	0	60

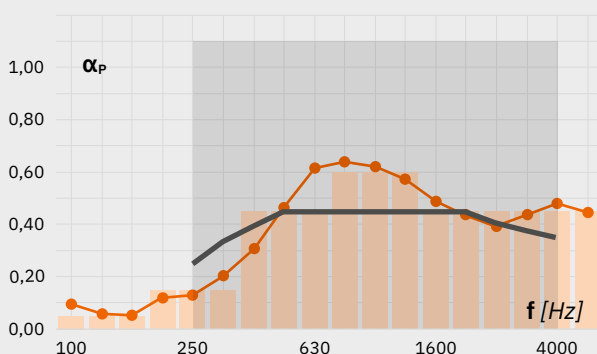
Absorption coefficient α_w : 0.50
Absorption class: D



Panel M 4-16/4-32

Plywood	Grooving distance		Mineral wool	Air Gap
A	DF	RF	C	D
15	16	32	0	60

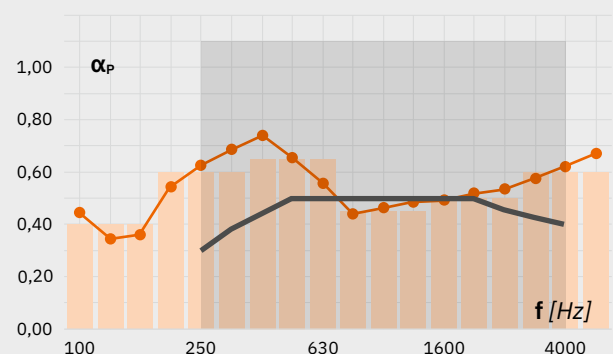
Absorption coefficient α_w : 0.45
Absorption class: D



Panel M 4-16/4-16

Plywood	Grooving distance		Mineral wool	Air Gap
A	DF	RF	C	D
15	16	16	0	200

Absorption coefficient α_w : 0.50
Absorption class: D



Predicted sound absorption coefficient octave bands

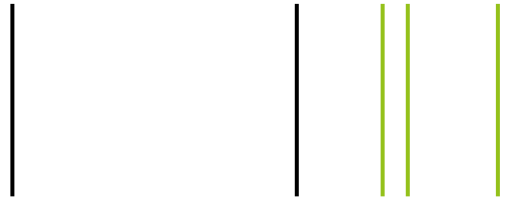
Predicted sound absorption coefficient in 1/3 octave bands

Reference curve by EN ISO 11654

Reference curve by EN ISO 11654

Acoustic Panels

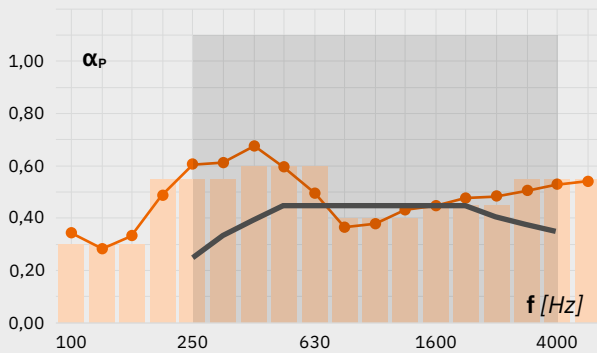
Grooved



Panel M 4-16/4-32

Plywood	Grooving distance		Mineral wool	Air Gap
A	DF	RF	C	D
15	16	32	0	200

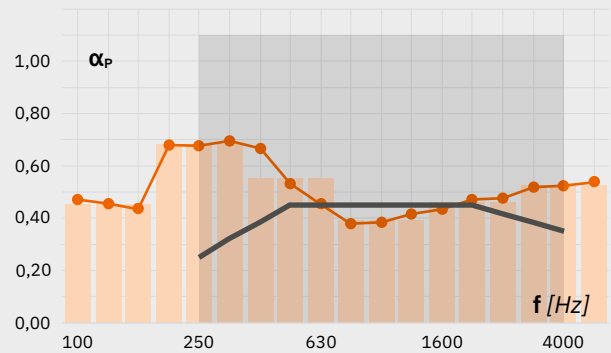
Absorption coefficient α_w : 0.45
Absorption class: D




Panel M 4-16/4-64


Plywood	Grooving distance		Mineral wool	Air Gap
A	DF	RF	C	D
15	16	64	0	200


Absorption coefficient α_w : 0.55
Absorption class: D




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 Predicted sound absorption coefficient octave bands

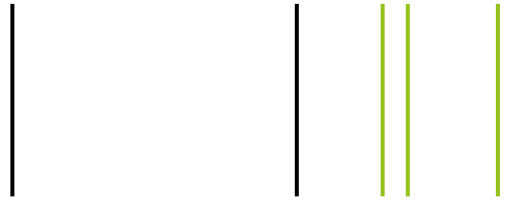
 Predicted sound absorption coefficient in 1/3 octave bands

 Reference curve by EN ISO 11654

 Reference curve by EN ISO 11654

Acoustic Panels

Grooved



Sustainability

We strongly believe that wood-based products in industrial use are a great option for carbon storage and a big part of the solution to achieve climate change mitigation. The key principles of sustainability and responsible governance are deeply rooted in our company's traditions and we aim to further develop our initiatives by actively engaging with stakeholders, material suppliers and clients.

Storage

Plywood must be stored in a well ventilated, weather protected area with the panels stacked both horizontally and level.

Additional information is available in the Riga Wood plywood handbook: <https://www.finieris.com/en/downloads/brochures>

Riga Wood
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finieris.com



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