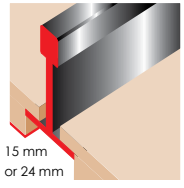
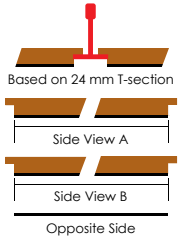
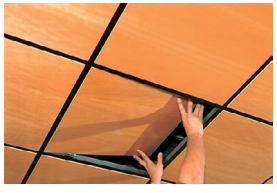
LAWAPAN® CEILING

BASIC, SYSTEM & SELECT | WOOD VENEERED ACOUSTIC PANELS

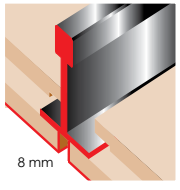
LAWAPAN® CEILING range is designed to mount in standard modular suspended grid systems.

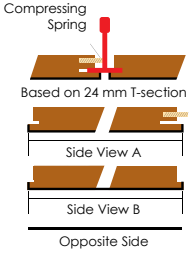


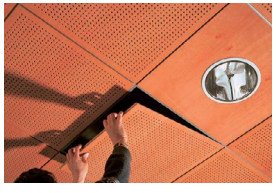




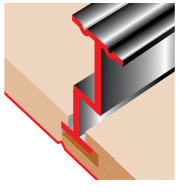
LAWAPAN® BASIC is a 17 mm thick, detachable panel with a drop-in rabbet for mounting in a suspension system, using 15 mm or 24 mm T-sections.

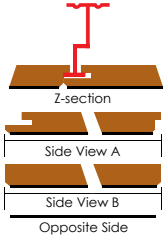


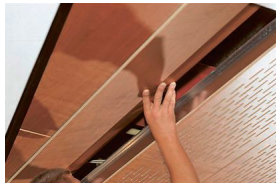




LAWAPAN® SYSTEM is a semi-concealed, detachable ceiling panel with a thickness of 17 mm for mounting in a suspension system, using 24 mm T-sections. After installing, only 8 mm of the T-section is in sight. Each panel can be individually detached from underneath. Design, groove and compression springs are patented.







LAWAPAN® SELECT is a 17 mm thick, concealed and detachable panel with rabbet, groove and bevelled edges all around for mounting in a suspension system, using 24 mm T-sections or using Z-profiles.

TYPE

Acoustic panel for interior application

MATERIALS

Face*:	Sliced Real Wood Veneer, 0.6 mm
	Quality A, or as specified
	**FSC-Certified wood veneers available*
	**Engineered wood veneers available*
	**Painted finishes available*
	**High Pressure Laminate (HPL) available*
Finish:	UV Premium Interior Lacquered - Clear
Base:	Fire-retardant MDF
Back:	Blind Veneer + Black Acoustic Fleece
Core *(Optional)*:	50 mm acoustic core can be installed behind **LAWAPAN®** panels to maximise acoustic performance.
	Acoustic core and furring typically provided as separate items.

STANDARD DIMENSIONS *(Custom sizes available)*

Thickness:	17 mm
Size (L x W):	600 mm x 600 mm
	1200 mm x 600 mm
	2420 mm x 290 mm
	2420 mm x 600 mm

ACOUSTICS

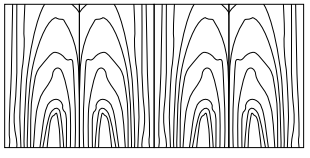
NRC as high as 0.85 according to perforation and installation methods. A wide variety of sizes and configurations available in round or slotted perforations. Custom perforations available including square-edge perforation and micro perforation.
See perforation guide on subsequent pages.

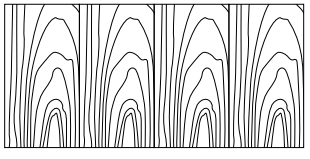
MOUNTING

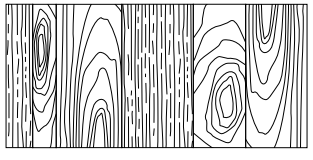
24 mm T-section or Z-profile, mounted to timber or metal furring.

WOOD VENEER

The view-side of panels are finished with a top quality, hand-selected veneer. Over 40 wood species are available in stock. Panels are finished in a premium clear lacquer over a three-stage process, ensuring only the highest standard and durability. Custom staining and PANTONE, RAL or NCS colour matching is available. Veneer sheets with a width of 10 cm to 20 cm are typically book-matched to ensure continuation. Slip-matched or mismatched sheets can be produced upon request, providing a natural or variable wood art effect.


Book-matched

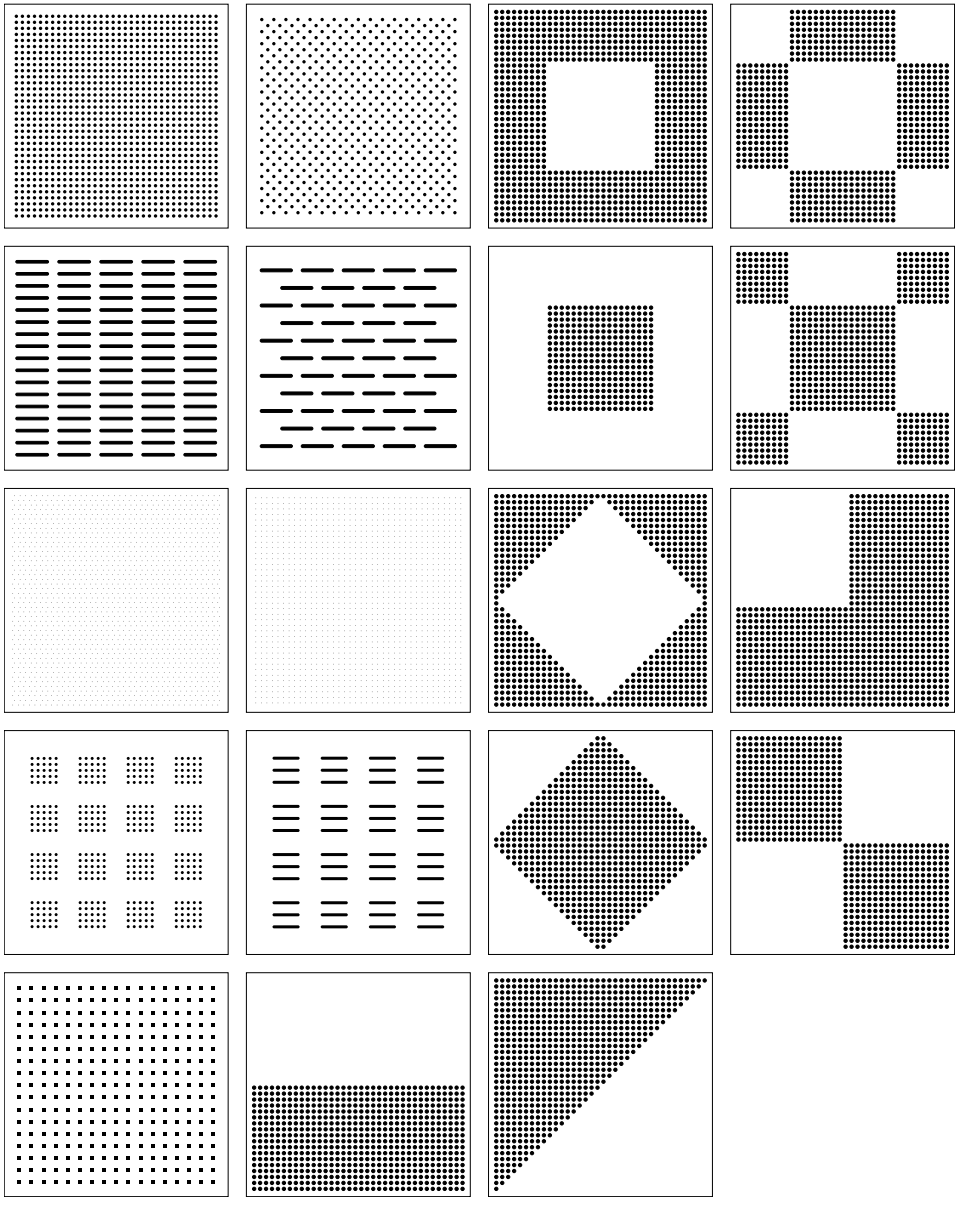

Slip-matched


Mismatched

FLAMMABILITY

Fire test data performed by independent laboratories. Support documentation available upon request. Note that all data provided is for typical usage.
eomac is adaptable to other situations and custom applications.

CANADA:	CAN/ULC-S 102: Class 1
EU:	EN 13501-1: Class B, s2, d0
USA:	ASTM E-84: Class A
	NFPA 265; UBC 8-2: Passes



Various patterns can be combined to form unique designs.

SELECTING PERFORATION

Please review acoustic data and select the look and performance that meets any project criteria.

PERFORATION

Acoustics by means of a perforation with a diameter of 7 mm, 8 mm or 9 mm
Centre to centre distance between perforations: 16 mm, 32 mm or 64 mm
Panels are available with regular and irregular perforations.
Custom-shaped perforations available upon request.

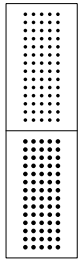
MICRO PERFORATION AND SQUARE-EDGE PERFORATION

Available as SELECT and SYSTEM in panel size of 2400 mm x 600 mm
Micro perforation of Ø1.5 mm, regular distance 8 mm
Number of perforations per m^2: 10,500
Square-edge perforation of 5 mm, regular distance 32 mm

SLOTS

Acoustics by means of a regular or irregular CNC grooved panel
The diameter of the CNC grooved slot Ø8 mm
Ø7 mm and Ø9 mm available upon request, length of the slot approximately 87 mm
Centre to centre distance between the slots: 24 mm, 32 mm or 48 mm

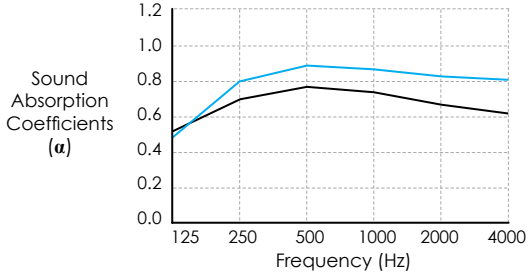
ACOUSTICS THROUGH PERFORATION & MICRO PERFORATION

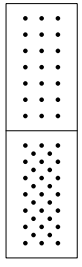


— Regular perforation Ø7 mm: Centre to centre 16 mm; 15.0% perforation rate
— Regular perforation Ø9 mm: Centre to centre 16 mm; 24.9% perforation rate
Depth of construction: 200 mm

	Sound Absorption Coefficients (Hz)						α_w	NRC
Perforation	**125**	**250**	**500**	**1000**	**2000**	**4000**	**(ISO 11654)**	**(ASTM - C423)**
Ø7 mm	0.52	0.70	0.77	0.74	0.67	0.62	**0.70**	**0.70**
Ø9 mm	0.48	0.80	0.89	0.87	0.83	0.81	**0.90**	**0.85**

Values 1/1 octave

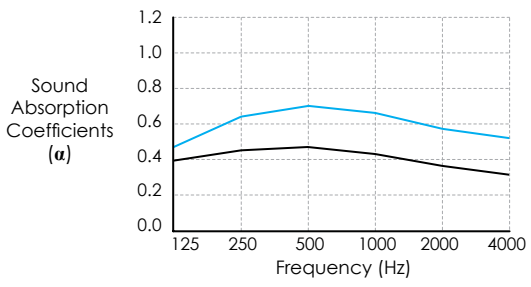


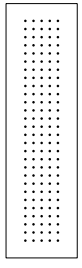


— Regular perforation Ø9 mm: Centre to centre 32 mm; 6.2% perforation rate
— Irregular perforation Ø9 mm: Centre to centre 32/16 mm; 12.4% perforation rate
Depth of construction: 200 mm

	Sound Absorption Coefficients (Hz)						α_w	NRC
Perforation	**125**	**250**	**500**	**1000**	**2000**	**4000**	**(ISO 11654)**	**(ASTM - C423)**
Ø9 mm	0.39	0.45	0.47	0.43	0.36	0.31	**0.40**	**0.45**
Ø9 mm	0.47	0.64	0.70	0.66	0.57	0.52	**0.60**	**0.65**

Values 1/1 octave

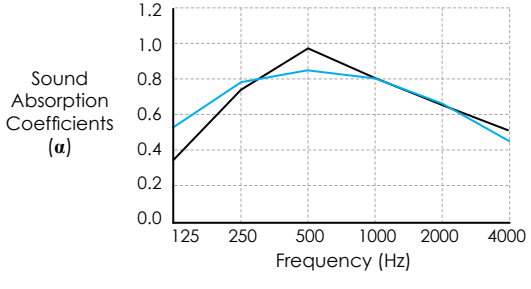


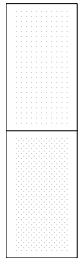


— Depth of construction: 67 mm
— Depth of construction: 200 mm
Regular perforation view side Ø5 mm, reverse side Ø9 mm: Centre to centre 16 mm; 7.7% perforation rate

	Sound Absorption Coefficients (Hz)						α_w	NRC
Depth	**125**	**250**	**500**	**1000**	**2000**	**4000**	**(ISO 11654)**	**(ASTM - C423)**
67 mm	0.34	0.74	0.97	0.81	0.65	0.51	**0.65**	**0.80**
200 mm	0.52	0.78	0.85	0.80	0.66	0.45	**0.65**	**0.80**

Values 1/1 octave

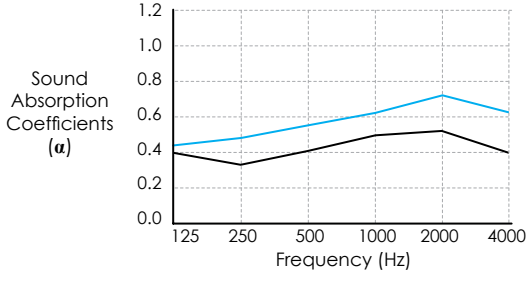




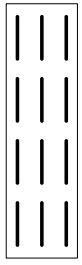
— Regular micro perforation Ø1.5 mm: Centre to centre 8 mm; 7.1% perforation rate
— Irregular micro perforation Ø1.5 mm: Centre to centre 8/4.5 mm; 14.1% perforation rate
Depth of construction: 67 mm

	Sound Absorption Coefficients (Hz)						α_w	NRC
Perf. Rate	**125**	**250**	**500**	**1000**	**2000**	**4000**	**(ISO 11654)**	**(ASTM - C423)**
7.1%	0.39	0.32	0.40	0.49	0.51	0.39	**0.50**	**0.45**
14.1%	0.44	0.48	0.55	0.62	0.72	0.62	**0.60**	**0.60**

Values 1/1 octave



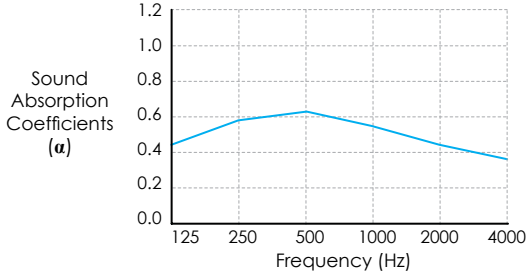
ACOUSTICS THROUGH SLOTS

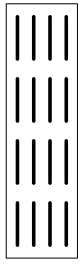


Regular slots, width 7 mm, length 97 mm, centre to centre 48 mm; 10.7% perforation rate
Depth of construction: 200 mm

Sound Absorption Coefficients (Hz)						α_w	NRC
125	**250**	**500**	**1000**	**2000**	**4000**	**(ISO 11654)**	**(ASTM - C423)**
0.44	0.58	0.63	0.55	0.44	0.36	**0.50**	**0.55**

Values 1/1 octave

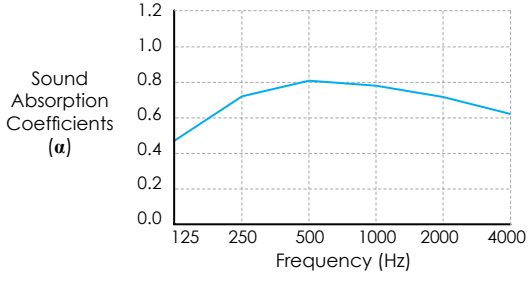


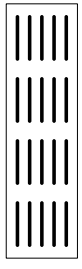


Regular slots, width 7 mm, length 97 mm, centre to centre 32 mm; 16.1% perforation rate
Depth of construction: 200 mm

Sound Absorption Coefficients (Hz)						α_w	NRC
125	**250**	**500**	**1000**	**2000**	**4000**	**(ISO 11654)**	**(ASTM - C423)**
0.46	0.67	0.73	0.68	0.60	0.52	**0.65**	**0.65**

Values 1/1 octave

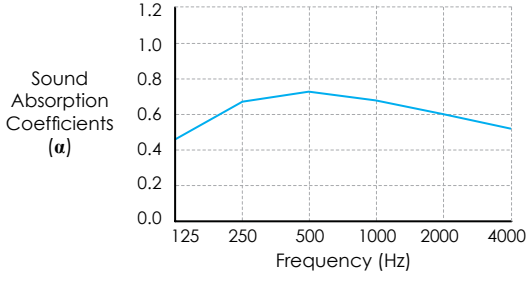


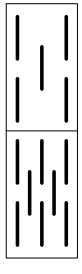


Regular slots, width 7 mm, length 97 mm, centre to centre 24 mm; 21.4% perforation rate
Depth of construction: 200 mm

Sound Absorption Coefficients (Hz)						α_w	NRC
125	**250**	**500**	**1000**	**2000**	**4000**	**(ISO 11654)**	**(ASTM - C423)**
0.47	0.72	0.81	0.78	0.72	0.62	**0.75**	**0.75**

Values 1/1 octave

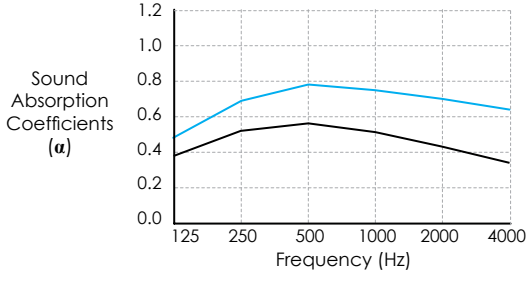




Irregular slots, width 7 mm, length 97 mm, centre to centre 48 mm; 10.7% perforation rate
Irregular slots, width 7 mm, length 97 mm, centre to centre 24 mm; 21.4% perforation rate
Depth of construction: 200 mm

	Sound Absorption Coefficients (Hz)						α_w	NRC
Perf. Rate	**125**	**250**	**500**	**1000**	**2000**	**4000**	**(ISO 11654)**	**(ASTM - C423)**
10.7%	0.48	0.69	0.78	0.75	0.70	0.64	**0.75**	**0.75**
21.44%	0.38	0.52	0.56	0.51	0.43	0.34	**0.50**	**0.50**

Values 1/1 octave



INSTALLATION GUIDELINES

- Prior to installation, **LAWAPAN®** should be acclimatised for a minimum of 24 hours.
- Installation of **LAWAPAN®** can start only in a controlled environment, when temperature and humidity conditions have reached to the standard occupancy conditions.
- Humidity should not exceed 65%.
- Veneer is a natural product with natural colour and structure variations. As such it is advised that **LAWAPAN®** panels be sorted before assembly in order to ensure uniformity.
- Panels to be installed on furring (timber recommended) spaced according to panel sizes.
- Prior to mounting **LAWAPAN®** panels, ensure furring is plum and level.
- Secure **LAWAPAN®** panels with manufacturer supplied clips at furring points along mounting groove. If necessary, a finish nailer can be used for added support.
- It is recommended to leave a 2 mm gap between **LAWAPAN®** panels, which meet at short ends, to allow for potential expansion / contraction, as new construction settles.
- **LAWAPAN®** panels to be installed by qualified installers only.
- The methods described in this document are provided as guidance only. Relevant national building and installation codes should be strictly followed and take precedence.
- **eomac** is not responsible for any damage or deficiency caused by improper installation.

For more information on LAWAPAN® CEILING, please contact us.