

AAPG ACOUSTIC PLANKS TECHNICAL DATA SHEET

AAPG Acoustic Planks

Perforated linear planks in real wood veneer or high-pressure laminate, with acoustically transparent backer, for walls and ceilings.



White HPL Acoustic Planks on a barrel ceiling, Fort Lauderdale Yacht Club. Project installation shown for reference; a curved ceiling and its cavity differ from the flat Type C-90 assembly on which the stated NRC 0.90 is based, so absorption in this condition is not the tested value.

PRODUCT OVERVIEW

AAPG Acoustic Planks are factory-fabricated linear acoustical planks consisting of a perforated or grooved wood fiber substrate faced with wood veneer or high-pressure laminate, backed with an acoustically transparent fleece, supplied with concealed mounting hardware, furring, trim, and accessories. Reference specification: Section 09 8413 - Fixed Sound-Absorptive Panels.

Face width	Nominal 7-1/4" (184 mm)
Length	Nominal 96" (2438 mm)
Thickness	3/4" (19 mm)
Reveal width	1/4" (6 mm)
Sound absorption (NRC)	0.90 (NRC), tested assembly; SAA 0.88 (Riverbank RAL-A24-285)
Open area	Approx. 5% (tested micro-perforated face; 0.5 mm holes at 1.9 mm pitch)

TECHNICAL DATA

Characteristic	Technical data
Substrate	Medium-density fiberboard (MDF) conforming to ANSI A208.2, industrial grade; available comprising not less than 75 percent recycled wood waste, or with No Added Formaldehyde
Perforation pattern	Micro-perforated 0.020 in. (0.5 mm) diameter holes at approximately 0.075 in. (1.9 mm) pitch (tested face); perforated 1/8 in. (3 mm), slotted, and grooved patterns also available, machined through the plank face and substrate and aligned continuously across end joints
Open area	Approximately 5 percent for the tested micro-perforated face (0.5 mm diameter holes at 1.9 mm pitch). Open area differs for the perforated 1/8 in., slotted, and grooved patterns and is established per pattern.
Acoustic backer	Acoustically transparent non-woven black fleece factory-laminated to the plank back, continuous across all perforations
Acoustic infill	Nominal 1" (25 mm) mineral wool or polyester (PET) batt in the cavity behind the planks; density to be specified
Air cavity	Nominal 1" (25 mm), 2" (51 mm), or 4" (102 mm) behind the planks
Wood veneer facing	Real Wood Veneers "AA" architectural-grade veneer, 0.010" to 0.015" (0.25 to 0.38 mm), with furniture-grade catalyzed finish of approximately 0.003" (0.08 mm); balancing backer 0.015" to 0.025" (0.38 to 0.64 mm)
HPL facing	Vertical-grade high-pressure plastic laminate adhered to the perforated substrate, with kraft paper balancing backer
Edge profiles	Square edge tight joint; square edge with open reveal; tongue-and-groove; shiplap
Mounting	Concealed clip system on aluminum carrier rails; concealed spline and clip on wood or metal furring; tongue-and-groove with concealed fasteners; or direct mechanical fastening with concealed heads
Surface burning characteristics	ASTM E84; Class A (Class 1), flame-spread index 25 or less and smoke-developed index 450 or less, or Class C. Independent test reports to be submitted
Installation tolerance	Maximum 1/16" (1.6 mm) variation between adjacent planks; reveal width within 1/32" (0.8 mm); 1/8" in 8 ft (3 mm in 2.4 m) from level, plumb, and line
Environmental limits	Maintain 60 to 80 °F (16 to 27 °C) and 35 to 55 percent relative humidity during storage, installation, and the product life cycle. Not for exterior, high-humidity, or wet locations. Acclimate 72 hours prior to installation.
Applications	Dry interior walls and ceilings

Tested configuration. NRC 0.90 applies to the micro-perforated (~5% open) face in the Type C-90 mounting of report RAL-A24-285, which supersedes the earlier RAL-A24-129 (NRC 0.70). This result substantiates the perforated MDF acoustic plank. Assemblies using the perforated 1/8 in., slotted, or grooved patterns, or other cavity depths, require their own test data. The superseding test specimen was characterized by the laboratory as press board; confirm the production substrate against this data sheet's stated MDF construction.

Nominal dimensions: All dimensions shown are nominal. Final product selection and detailing should be confirmed against current production data, project conditions, applicable codes, and installation requirements.

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Installation. This data sheet is issued for product selection and design coordination only. **It is not an installation instruction, and nothing on this document is to be used for installation.** Install in accordance with AAPG's current published installation instructions and the approved shop drawings. The dimensions, details, and data shown here describe the product; they do not describe the substrate preparation, sequence, fixings, or tolerances required to install it. Where this sheet and the installation instructions differ, the installation instructions govern.

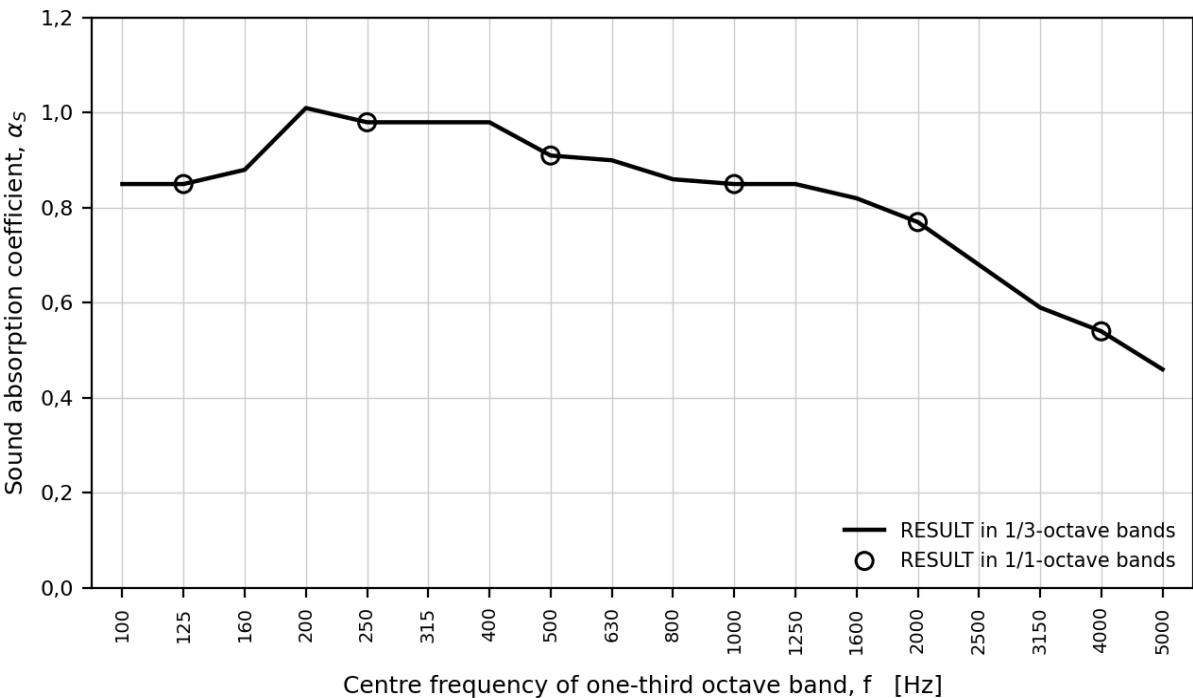
Acoustic Performance

Sound absorption was measured by Riverbank Acoustical Laboratories (Geneva, Illinois; NVLAP Lab Code 100227-0) in accordance with ASTM C423-23, with specimen mounting per ASTM E795-23. Test conducted July 15, 2024; report RAL-A24-285 (which supersedes RAL-A24-129). The specimen was a perforated-face acoustic plank of approximately 72 sq. ft. (6.722 m²) calculation area, 0.799 in. (20.29 mm) thick, tested in the Type C-90 mounting described below.

Tested assembly	Mounting	NRC
Acoustic Plank Panel over 3.5 in. (89 mm) stud cavity fully filled with semi-rigid fiberglass insulation	ASTM E795 Type C-90	0.90

Sound Absorption Coefficients

One-third-octave sound absorption coefficients from report RAL-A24-285 (superseding RAL-A24-129). SAA = 0.88; NRC = 0.90. Non-accredited extended-range appendix bands are not shown here.



TEST BASIS

ASTM C423-23 reverberation-room method; ASTM E795-23 Type C-90 mounting. Riverbank Acoustical Laboratories, report RAL-A24-285, conducted July 15, 2024, issued July 22, 2024. Supersedes RAL-A24-129. Instruments in current calibration at test date.

IMPORTANT LIMITATION

Results apply only to the specific sample submitted and the tested Type C-90 mounting. The tested face was the micro-perforated pattern (~5% open); other perforation patterns, facings, and mounting depths will perform differently. Cavity depth, insulation, and perimeter conditions all affect performance. Do not extrapolate to untested assemblies.

Riverbank Acoustical Laboratories is NVLAP-accredited (Lab Code 100227-0). Per the report, it must not be used to claim product certification or endorsement by RAL, NVLAP, NIST, or any U.S. government agency, and must not be modified without RAL's written approval. This data sheet summarizes the report for product-selection purposes and does not replace it. SAA is the average of the 200-2500 Hz bands; NRC is the average of the 250, 500, 1000, and 2000 Hz coefficients.