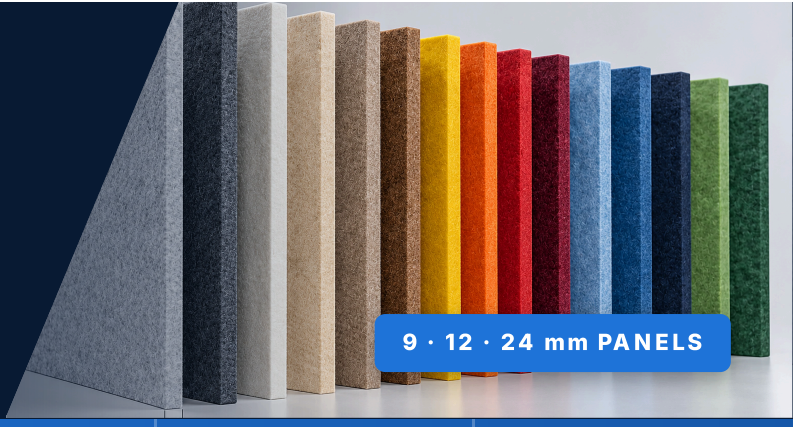
TECHNICAL DATA SHEET

YAMSIS PET

Polyester Acoustic Panels

Lightweight 100% polyester-fibre acoustic board for walls, ceilings and baffles — 67 colours, no formaldehyde detected, B-s1,d0 and ASTM E84 Class A.

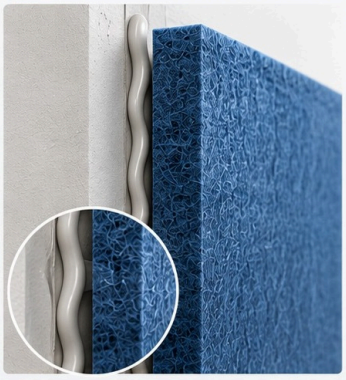


0.75	B-s1,d0	1.22×2.44 m	67	ND
NRC · 12 MM + CAVITY	EN 13501-1 · SGS 2025	STANDARD SHEET	STANDARD COLOURS	HCHO · NOT DETECTED

MOUNTING DETAILS

SECTIONS — NOT TO SCALE

A DIRECT FIX



A Walls
Silicone or suitable construction adhesive on flat, dry walls. Fastest and most economical.

B ON BATTENS · AIR GAP



B Air gap
Timber battens create a cavity behind the panel — improved acoustics at low frequencies.

C V-GROOVE · DIRECT FIX



C Grooving
CNC V-grooved panels fixed directly to the wall with adhesive — 50+ patterns (S1, S2, C1, C2, N series). 0.5 mm skin; folds with no visible cut edge.

TECHNICAL DATA

Material	**100% polyester (PET) fibre, thermally bonded**
Sheet size	**1220 × 2440 mm (±5 mm)**
Thickness	**9 · 12 · 24 mm**
Density	**2400 g/m² (12 mm) · 1750 g/m² option**
Weight	**≈ 7.1 kg per 12 mm sheet (5.2 kg at 1750)**
Colours	**67 standard · custom on request**
Finishes	**Plain · CNC V-groove · printed**
Binder	**No formaldehyde-based binders**
Eco profile	**Recycled polyester fibre · 100% recyclable**
Emission	**E1 · formaldehyde not detected**
Durability	**Impact- & moisture-resistant · pinnable**
Quality	**CE · ISO 9001 (mfr) · ISO 9001/14001/45001 (Yamamah Smart)**
Order code	**PET-12-1220×2440-C01**

FIRE PERFORMANCE

B-s1, d0 · Class A
EN 13501-1 · ASTM E84

Test	Result
EN 13501-1:2018	**B-s1, d0** · on A1/A2 substrate
EN 13823 (SBI)	FIGRA 12.5 W/s · THR 1.5 MJ
Smoke	SMOGRA 3.8 m²/s² · TSP 17.9 m²
EN ISO 11925-2	Fs ≤ 150 mm · no droplets
ASTM E84-21a	**Class A** · FSI 24 · SDI ≤ 450

EN: SGS AJFTS25001426R01_EN, 7 Apr 2025, 9 mm, on A1/A2 substrates. ASTM E84: SGS AJFS2111009514FF, 29 Nov 2021, 9.1 mm, self-supporting.

HEALTH

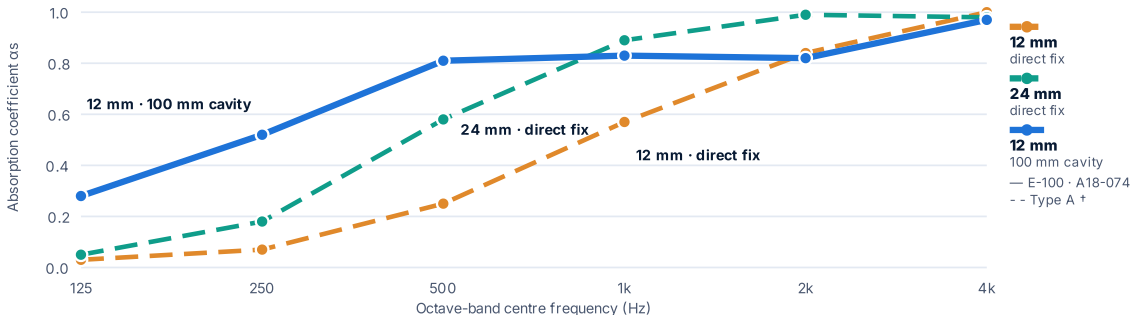
Test	Result
Formaldehyde GB/T 2912.1	**Not detected** (< 20 mg/kg)

Values are nominal; test results apply to the samples as tested. Absorption depends on thickness and mounting. Images are illustrative; colours indicative — approve a physical sample.

ACOUSTIC PERFORMANCE & APPLICATIONS

YAMSIS PET — Polyester Acoustic Panels

SOUND ABSORPTION BY MOUNTING (ISO 354)



Mounting	Panel	125	250	500	1k	2k	4k	NRC	αw	Test standard
Direct fix (Type A)	12 mm	0.03	0.07	0.25	0.57	0.84	1.00	**0.40–0.45**	0.30 (MH)	ISO 354 / C423 †
25 mm air gap	12 mm	0.05	0.23	0.54	0.90	0.98	0.92	**0.65**	0.55 (MH)	ISO 354 †
100 mm air cavity	12 mm	0.28	0.52	0.81	0.83	0.82	0.97	**0.75**	0.80 (H) · B	ISO 354 · A18-074
Direct fix (Type A)	24 mm	0.05	0.18	0.58	0.89	0.99	0.98	**0.65**	0.50 (MH)	ISO 354 / C423 †
25 mm air gap	24 mm	0.11	0.31	0.76	0.97	0.99	0.97	**0.75**	0.60 (MH)	ISO 354 †
50 mm air gap	24 mm	0.14	0.41	0.90	1.05	0.95	0.96	**0.85**	0.70 (H)	ISO 354 †

Tested: Tsinghua University report A18-074 (2018) — 12 mm at 1.7 kg/m² (standard 2.4 kg/m² board performs equal or better), 100 mm cavity on C50 steel frame, 10.08 m²; octave values averaged from 1/3-octave data (full data in attached report). † Mean of published laboratory tests by leading PET panel manufacturers (direct fix: 8 reports 12 mm, 6 reports 24 mm; air gap: 1–2 reports each) to ISO 354 / AS ISO 354 / EN ISO 354 / ASTM C423 — reference values for PET of equal thickness. αw per ISO 11654.

APPLICATIONS & V-GROOVE DESIGNS







PRODUCT RANGE

Thickness	Density	Weight / sheet	Typical use
9 mm	≈ 1100 g/m²	≈ 3.3 kg	Wall lining, pinboards, printed panels
12 mm	2400 / 1750 g/m²	≈ 7.1 / 5.2 kg	Walls, ceilings, V-groove designs
24 mm	≈ 4000 g/m²	≈ 11.9 kg	Baffles, screens, high-absorption walls

Installation

Acclimatise panels 24 h. Fix with contact adhesive, pins, Z-clips or on battens. Cut with a sharp knife or CNC; V-groove to fold. Leave 1–2 mm at joints for movement.

Care & durability

Vacuum with a soft brush; spot-clean with a damp cloth. Moisture- and impact-resistant, dimensionally stable, pinnable. Store flat, dry and shaded.

COMPLIANCE SUMMARY

EN 13501-1	ASTM E84	ISO 354	ISO 11654	GB/T 2912.1
B-s1, d0	**Class A**	**NRC 0.75 (cavity)**	**Class B (cavity)**	**HCHO not detected**

Specification clause (for BOQ / specifications)

Acoustic wall/ceiling panels: YAMSIS PET by Yamamah Smart, 100% polyester fibre, [12] mm thick, [2400] g/m², 1220 × 2440 mm, colour YAMSIS-[xx]. Sound absorption NRC ≥ 0.75 with 100 mm cavity (ISO 354). Reaction to fire B-s1,d0 to EN 13501-1 (on A1/A2 substrate) and Class A to ASTM E84. Formaldehyde not detected (GB/T 2912.1). Finish: [plain / CNC V-groove]. Fixing: [adhesive / battens / suspension kit] to manufacturer's instructions.

COLOUR COLLECTION

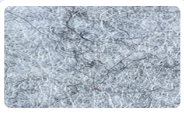
YAMSIS PET — 67 standard colours · 1220 × 2440 mm · 9 / 12 / 24 mm



YAMSIS-01
Light Camel



YAMSIS-02
Dark Camel



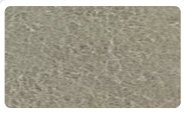
YAMSIS-03
Silver Gray



YAMSIS-04
Pine Green



YAMSIS-05
Orange Yellow



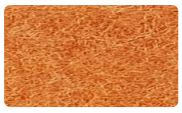
YAMSIS-06
Oat Gray



YAMSIS-07
Light Coffee



YAMSIS-08
Cassia Yellow



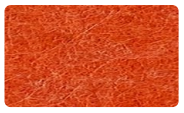
YAMSIS-09
Golden Copper



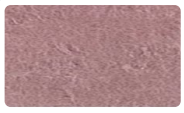
YAMSIS-10
Blush Pink



YAMSIS-11
Pale Yellow



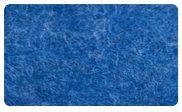
YAMSIS-12
Honey Tangerine



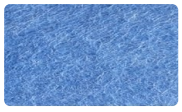
YAMSIS-13
Coral Pink



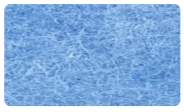
YAMSIS-14
Sea-Sky Blue



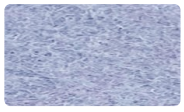
YAMSIS-15
Royal Blue



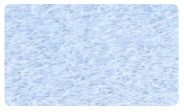
YAMSIS-16
Sky Blue



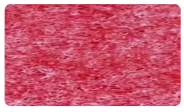
YAMSIS-17
Light Sky Blue



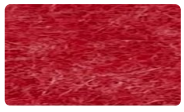
YAMSIS-18
Smoke Gray



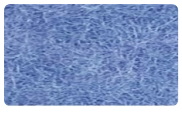
YAMSIS-19
Cyan White



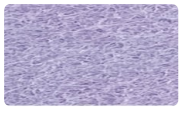
YAMSIS-20
Watermelon Red



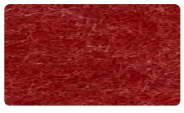
YAMSIS-21
May Red



YAMSIS-22
Water Gray



YAMSIS-23
Sakura Pink



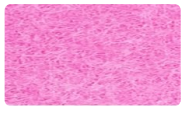
YAMSIS-24
Rouge Red



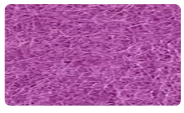
YAMSIS-25
Purplish Red



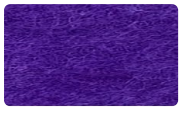
YAMSIS-26
Beige



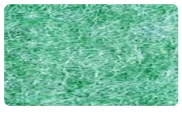
YAMSIS-27
Peach Blossom Pink



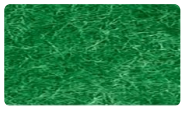
YAMSIS-28
Rose



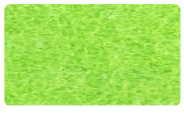
YAMSIS-29
Violet



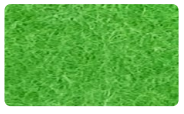
YAMSIS-30
Autumn Leaf Green



YAMSIS-31
Emerald Green



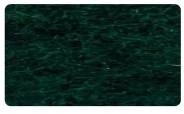
YAMSIS-32
Jade Green



YAMSIS-33
Deep Green



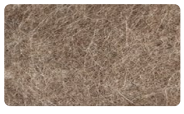
YAMSIS-34
Matcha Green



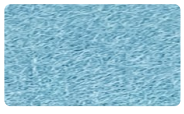
YAMSIS-35
Ink Green

YAMSIS-36
New White

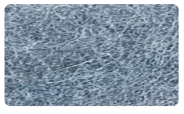
YAMSIS-37
Pale Yellow Light



YAMSIS-38
Walnut



YAMSIS-39
Azure



YAMSIS-40
African Gray

YAMSIS-41
Moonlight Gray

YAMSIS-42
Chengdu Red

YAMSIS-43
Milk Coffee

YAMSIS-44
Mystery Purple

YAMSIS-45
Red Coffee

YAMSIS-46
Dark Red

YAMSIS-47
Midnight Navy

YAMSIS-48
Bluebird

YAMSIS-49
Telecom Blue

YAMSIS-50
Deep Cyan

YAMSIS-51
Dark Blue

YAMSIS-52
Coffee

YAMSIS-53
Sesame Black

YAMSIS-54
Dark Gray

YAMSIS-55
Black

YAMSIS-56
Glacier Silver

YAMSIS-57
Moon White

YAMSIS-58
Olive 1918

YAMSIS-59
Teal 1921

YAMSIS-60
True Color-1 Yellow

YAMSIS-61
Wine 1920

YAMSIS-62
Stone 1902

YAMSIS-63
Aqua 1906

YAMSIS-64
Mustard 1915

YAMSIS-65
Forbidden City Red

YAMSIS-66
Atour Silver Gray

YAMSIS-67
Australian Camel

Colours shown are photographic and indicative only — batch variation may occur. Always approve a physical sample before ordering. Custom colours available on request (MOQ applies).