FELTBAY
FROM PLASTIC TO PURPOSE

DOCUMENT
Technical Data Sheet

REVISION
FB-AP-12MM · EN · REV 01

FROM PLASTIC TO PURPOSE · ACOUSTIC PANEL

12 mm

ACOUSTIC PANEL

FELTBAY
Acoustic Panel.

SERIES
PET Felt Panel

MATERIAL
100% Polyester Fiber

RECYCLED CONTENT
≥ 80% Post-consumer

— INTRODUCTION

Acoustic panels, built with purpose.

FELTBAY Acoustic Panels are versatile sound-absorbing solutions designed for a wide range of interior applications. Lightweight, semi-rigid and engineered from **100% polyester fibre**, they balance acoustic performance with a refined, tactile finish.

Available in thicknesses from 3 mm to 24 mm, panels can be fully customised through printing, moulding, pressing, precision cutting, grooving and peel-and-stick application — and require no edging or capping for clean, seamless installation.

12 mm	0.40	≥ 80 %
NOMINAL THICKNESS	NRC · DIRECT FIX	RECYCLED PET

CUSTOMISATION

Printing · Moulding & Pressing · Precision Cutting · Grooving · Peel-and-Stick. No edging required.

APPLICATIONS

Wall lining · Ceiling panels · Acoustic features · Custom solutions.

AT A GLANCE

THICKNESS
12 mm

DENSITY
2400 g/m²

COMPOSITION
100% PET (≥80% rec.)

NRC (DIRECT)
0.40

FIRE CLASS
ASTM E84 – Class A
EN13501 – B-s1,d0*

*Majority of colours and range available to this standard, some colour/ranges achieve B-s2,d0.

— SUSTAINABILITY

From plastic to purpose.

FELTBAY panels are engineered with a strong commitment to **sustainability, circularity** and **healthy indoor environments** — designed to meet international standards for environmental performance and material safety.

SUSTAINABILITY PILLARS

Recycled content · Low emissions · Circular design · Healthy interiors · Long lifecycle.

RECYCLED CONTENT

Manufactured from high levels of recycled PET — primarily post-consumer plastic bottles — reducing environmental impact and supporting a circular material economy.

INDOOR AIR QUALITY

Low VOC emissions contribute to improved indoor air quality and healthier interior spaces.

CIRCULAR DESIGN

Designed for a long lifecycle, reuse and recycling. Lightweight construction reduces transport emissions and overall environmental footprint.

GREEN BUILDING CONTRIBUTION

Feltbay panels contribute to LEED®, WELL, BREEAM and ESTIDAMA certifications through recycled content, low emissions and acoustic performance.

CERTIFICATIONS & COMPLIANCE

Global Recycled Standard · OEKO TEX® · RECYCLED 100 claim standard · RECYCLED BLENDED claim standard · BREEAM® · إستدامة estidama · INTERNATIONAL WELL BUILDING INSTITUTE WELL · U.S. GREEN BUILDING COUNCIL

— SPECIFICATIONS

Product information & performance.

PRODUCT INFORMATION

PRODUCT NAME	**FELTBAY PET Felt Panel — 12 mm**
DESCRIPTION	Acoustic panel manufactured from thermally bonded high-density polyester fibres, for wall and ceiling applications.
COMPOSITION	100% polyester fibre (PET) . ≥ 80% recycled content
THICKNESS	**12 mm** (0.47" nominal)
DENSITY	2400 g/m² (≈ 7.1 oz/ft²)
PANEL DIMENSIONS	1250 × 2800 mm (48.2" × 110.2") 1250 × 2440 mm (48.2" × 96.1")
TOLERANCE	± 5 mm (± 0.2")
MATERIAL CHARACTERISTICS	Non-woven PET panel · directional fibre grain · no pattern repeat · natural batch variation may occur.
INSTALLATION	Adhesive fixing · Mechanical fixing · Z-clip systems Install as per Feltbay guidelines.
APPLICATION	Wall lining · Ceiling panels · Acoustic features & custom solutions.

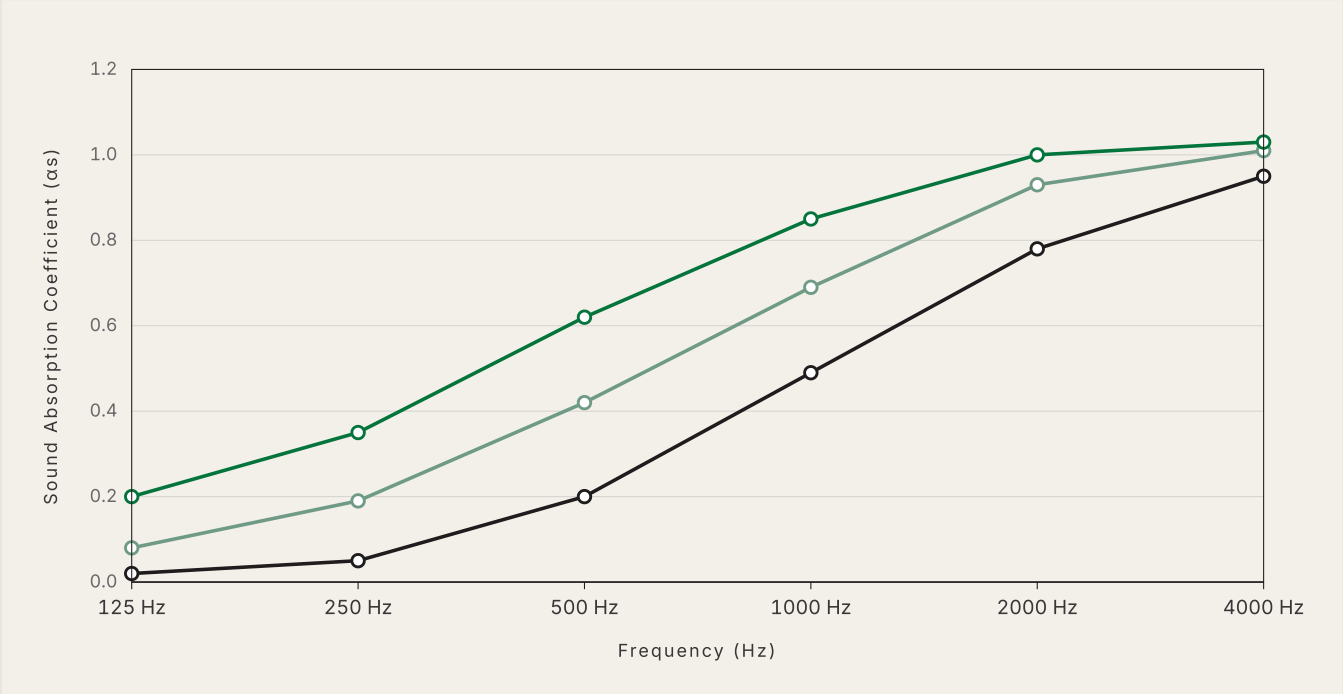
PERFORMANCE & TESTING

FIRE PERFORMANCE	**ASTM E84** — Class A **EN 13501-1** — B-s1,d0 / B-s2,d0
ACOUSTIC PERFORMANCE	12 mm (direct fix): **NRC 0.40** 50 mm air gap: NRC 0.55 50 mm air gap + insulation: NRC 0.70 Direct fix per EN ISO 354. Air gap and insulation values are engineering estimates.
MOISTURE PERFORMANCE	**ASTM C1104 / C1104M** 49 °C · 95% RH · 4 days — 0.4% by weight
IMPACT RESISTANCE	**ISO 7892:1988** Hard body — no damage up to 9 J (0.5 kg / 2 m) Soft body — no damage up to 70 J (50 kg / 150 mm)
MICROBIAL RESISTANCE	**ASTM G21** — Growth rating 0 (no growth)
COLOUR FASTNESS — LIGHT	**ISO 105-B02:2014** — Rating 6 (scale up to 7)
COLOUR FASTNESS — RUBBING	**ISO 105-X12:2016** — Dry 4–5 · Wet 4–5
MAINTENANCE	Clean with damp cloth. Upholstery shampoo if required. Avoid excessive water or abrasion.

— ACOUSTIC PERFORMANCE

Sound absorption, across the spectrum.

FELTBAY PET Felt panels provide high-performance sound absorption across a wide frequency range, enhancing acoustic comfort in interior environments. The direct-fix values below are tested in accordance with **EN ISO 354**; cavity and insulation values are engineering estimates.



FELTBAY **12 mm** · Direct Fix — FELTBAY **12 mm** · + 50 mm Air Cavity — FELTBAY **12 mm** · + 50 mm Insulation

FREQUENCY (HZ)	125	250	500	1000	2000	4000	NRC
FELTBAY 12 mm · Direct Fix	0.02	0.05	0.20	0.49	0.78	0.95	**0.40**
FELTBAY 12 mm · + 50 mm Air Cavity	0.08	0.19	0.42	0.69	0.93	1.01	**0.55**
FELTBAY 12 mm · + 50 mm Insulation	0.20	0.35	0.62	0.85	1.00	1.03	0.70

NRC = average of α250, α500, α1000 and α2000, rounded to nearest 0.05. 50 mm cavity and insulation values are engineering estimates based on the supplied direct-mount laboratory data; they are not laboratory test results.

PERFORMANCE HIGHLIGHTS

· Excellent mid- and high-frequency absorption
· Enhanced low-frequency performance with cavity or insulation
· Flexible performance depending on installation method
· Suitable for wall and ceiling applications

TEST METHOD

EN ISO 354 — Measurement of sound absorption in a reverberation room, using pink noise as the excitation signal in a controlled reverberant environment. The direct-fix row is laboratory data; the cavity and insulation rows are engineering estimates derived from it.

— COLOUR OVERVIEW

Colours & light reflectance.

FELTBAY panels are presented in a carefully curated colour palette structured across **five distinctive collections** — supporting diverse architectural visions, from calm and minimal interiors to bold expressive spaces.

All colours are referenced to the **NCS (Natural Colour System)** for precise specification, with measured **Light Reflectance Values (LRV)** to support lighting design. Reflectance ρ represents the percentage of visible light reflected by the panel surface.

HOW TO READ

Colour name
S 2040-B10G
LRV **45**

Each swatch shows the FeltBay theme name, the closest matching NCS code and the measured LRV value.

COASTAL

7 COLOURS · NCS REFERENCE

Inspired by sea and shore — cool blues, deep teals and bright tonal pairings to bring calm and depth to a space.

Alya
S 5010-B30G
LRV **25**

Hawa
S 2020-B10G
LRV **50**

Reef
S 7020-B10G
LRV **8**

Laz
S 4550-R80B
LRV **11**

Dana
S 2040-B10G
LRV **45**

Sama
S 2030-R90B
LRV **49**

Nyla
S 8505-R80B
LRV **4**

STONE

9 COLOURS · NCS REFERENCE

A foundation of warm and cool neutrals — calm, architectural and timeless.

Sora
S 1002-Y80R
LRV **75**

Niva
S 1002-G
LRV **79**

Sia
S 9000-N
LRV **3**

Lina
S 6000-N
LRV **26**

Dujan
S 7502-G
LRV **14**

Zill
S 8502-G
LRV **9**

Rimah
S 3000-N
LRV **53**

Marmar
S 3502-Y20R
LRV **47**

Fidda
S 2502-Y50R
LRV **55**

— COLOUR OVERVIEW · CONTINUED

Desert & Forest.

DESERT

11 COLOURS · NCS REFERENCE

Sun-baked ochres and earth tones — warmth, grounding and the patina of arid landscapes.

Dune S 5010-Y10R LRV **34**	**Sahara** S 3010-Y10R LRV **53**	**Cedar** S 6020-Y40R LRV **18**	**Masa** S 2502-Y LRV **59**
Ziya S 2040-Y10R LRV **48**	**Savannah** S 3050-Y80R LRV **27**	**Date** S 8010-Y50R LRV **10**	**Nour** S 3010-Y60R LRV **48**
Ivra S 2005-Y40R LRV **60**	**Terra** S 3050-Y50R LRV **30**	**Wadi** S 4050-Y60R LRV **20**	

FOREST

8 COLOURS · NCS REFERENCE

Living greens — from yellowed grasses to deep canopy. Biophilic palettes for restorative spaces.

Tala S 7020-G50Y LRV **12**	**Nael** S 5030-G30Y LRV **23**	**Zena** S 3005-G50Y LRV **52**	**Maha** S 4010-G70Y LRV **62**
Layan S 7020-Y LRV **13**	**Rayan** S 3060-G70Y LRV **34**	**Lura** S 8505-G LRV **5**	**Asel** S 1080-G30Y LRV **43**

— COLOUR OVERVIEW · CONTINUED

Vibrant accents.

VIBRANT

6 COLOURS · NCS REFERENCE

Saturated highlights — energetic accents for moments of contrast and focus.

Nari
S 2070-Y50R
LRV **31**

Aven
S 7020-Y90R
LRV **5**

Amara
S 2570-R
LRV **13**

Lulu
S 3010-R50B
LRV **47**

Auri
S 0560-G90Y
LRV **73**

Rubi
S 2570-R
LRV **10**

COLOUR INFORMATION & DISCLAIMER

NCS Colour Matching — The indicated NCS colour codes represent the closest visual reference and may not be an exact match due to the natural blending of fibres.

Recommendation — It is recommended to request a sample set to verify colours prior to specification or installation. Slight variations in reflectance may occur due to the natural composition of PET fibres and the textured surface of the material — these nuances contribute to the product's authentic finish.

— GET IN TOUCH

Made in the UAE.
Enhancing spaces worldwide

For technical specifications, sampling, or custom-fabrication enquiries — please contact your FELTBAY account manager or reach out below.

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DOCUMENT
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